Department of the Army
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Training and Doctrine Command
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TRADOC Pamphlet 350-70-1

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Training

GUIDE FOR PRODUCING COLLECTIVE TRAINING PRODUCTS

Summary	This pamphlet provides guidance to training developers for producing mission training plans (MTPs), and drill books.
Applicability	The procedures in this pamphlet apply to TRADOC centers and schools in preparing collective training documents for use by the Active Army, Army National Guard, and Army Reserve.
Suggested Improvements	The proponent for this pamphlet is the Deputy Chief of Staff for Training. Send comments and suggested improvements on DA From 2028 (Recommended Changes to Publications and Blank Forms), through channels to Commander, TRADOC, ATTN: ATTG-U, Fort Monroe, VA 23651-5000. Suggested improvements may also be submitted using DA Form 1045 (Army Ideas for Excellence Program (AIEP) Proposal).

Contents

*This pamphlet supersedes TRADOC Regulation 310-2, 15 July 1986, with Changes 1 and 2.

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Chapter 1

Introduction

1-1. Chapter Overview

Introduction	a. This pamphlet provides guidance for producing mission training plans (MTPs) and drill books that are products of collective training development. It describes how to design (prepare the training information to be included in the MTP or drill book) and develop the draft training document.
References	b. See Appendix A for required and related publications
Explanation of Terms	c. See the Glossary for terms used in this pamphlet. Also, refer to the Dictionary of United States Army Terms, the Army Training Glossary, and TRADOC Reg 350-70 (identified in Appendix A). Other terms will be defined in the body of the pamphlet as they are used.
Job Aids	d. See Appendix E, Summary Job Aid: Guide for Producing MTPs and Appendix F, Summary Job Aid: Guide for Producing Drill Books.

1-2. Collective Training

Introduction

a. Collective training builds combat teams. It develops critical teamwork needed by units and provides a challenging environment where units at various echelons can train to progressively tougher and more realistic conditions. In addition, it prepares soldiers to perform collective tasks that are essential for success in combat through training events.

Definition: Collective Training

b. Collective training is training, either in institutions or units, that prepares cohesive teams and units to accomplish their missions on the battlefield.

Characteristics of Collective Training

c. Collective training is :

- Part of unit training.
- Part of the Army Training and Evaluation Program (ARTEP).
- Performance oriented.
- A command responsibility.
- A continuous process executed in accordance with the unit training program.
- Training units to do the same tasks or missions they will do in wartime.

Definition: Collective Training Development

d. Collective training development (TD) is the systematic process of creating training materials for collective training. It is based on the Systems Approach to Training (SAT). One of the major functions of the collective TD process is to produce MTPs and drill books. These documents are the tools commanders use to plan, implement, and evaluate collective training.

Note: For information on SAT and collective training development see TRADOC Reg 350-70, Training Development Management, Processes, and Products.

Outputs of Collective TD

e. This table lists the outputs from each step of collective training development.

Step	Name	Outputs
1	Needs Analysis	• Training development requirements to revise or create MTPs or drill books.
2	Mission Analysis	• Mission analysis data. • Mission list. • Critical collective task list. • Supporting individual tasks.
3	Collective Task Analysis	• Collective task performance specifications. • Drill candidates list. • Individual tasks performed as part of the critical collective task.

Continued on next page

1-2. Collective Training, (Continued)

Outputs of Collective TD

e. (Continued.)

Step	Name	Outputs
4	Collective Training Design	•Approved unit training strategy for each proponent TOE unit. •Identified collective training product requirements. •Designed TADSS or embedded system training required to support unit training.
5	Production of MTPs	•Training matrixes. •Training outlines and plans (Battalion and higher). •Mission outlines (Company and below). •Training exercises. •Training and evaluation outlines. •Draft MTP developed and distributed for staffing. •Final draft MTP developed and distributed for staffing. •Camera ready copy (CRC) developed. •Approved documentation.
6	Production of Drills	•Drafts. •CRC drill books.

Responsibilities

f. Proponent commanders/commandants submit requests for revised or new MTPs or drill books to HQ TRADOC DCST (ATTG-U) for approval upon completion of needs analysis. Proponent will include with their request a copy of TRADOC Form 151-R, Milestone Work Sheet. For information on responsibilities ofDCST, ATSC, and proponents see TRADOC Reg 350-70. For information on TRADOC Form 151-R see TRADOC Reg 25-30.

Guide Coverage

g. This guide covers the last two steps of the collective TD process: the production of MTPs and the production of drills. For information on needs analysis, mission analysis, and collective task analysis, see TRADOC Reg 350-70, Training Development Management, Processes, and Products.

1-3. Mission Training Plans

Introduction

a. MTPs are a basic source document for collective training and are developed for use by leaders who have training responsibilities.

Definition of MTPs

b. MTPs are descriptive training documents that provide leaders with:

- An inventory of critical collective tasks that describe "what" to train.
- A suggested method on "how" to train to achieve critical wartime mission proficiency for each unit echelon.

Content of MTPs

c. MTPs are developed for each type TOE platoon, company, battalion, and brigade plus combined arms teams, task forces; brigades, divisions and corps command group/staffs; and/or combination of TOE units. Each MTP contains the following:

- Training information.
- Training matrixes.
- Mission outlines/training plans (battalion and higher).
- Sample training exercises (example: STXs, FTXs, CPXs, and so on).
- Comprehensive detailed T&EOs.
- Evaluation information.
- Appendixes describing Combined Arms Training Strategy (CATS) (for battalion and higher), sample operations order with threat statement, and other proponent specific information as appropriate.

Foundation of MTPs

d. MTPs are based on the training principles listed in FM 25-100 and FM 25-101. Battalion level and below MTPs must support their next higher level MTP.

1-4. Drill Books

Introduction

a. Drill Books originate from the collective tasks or task steps identified during the collective task analysis step of collective training development. They are an integral part of the unit support training strategy. They are designed to:

- Focus on a limited number of key actions that every like unit in the Army must master.
- Provide standardized actions that link solders and collective tasks at platoon level and below.
- Provide soldiers and units with the skills and knowledge to fight and win in any environment.

Definition of

b. Drills are disciplined, repetitious exercises to teach and perfect a skill or procedure. They are linked to MTPs in that they are a method for executing a collective task or task step.

Content of Drills

c. Drills may be an inclusion as a specific appendix of an MTP. Drills may also be published under a separate cover. The choice remains with the proponent. The MTP appendix or Drill Book contains as a minimum the following:

- Training information.
- Drills.
- Individual Task-to-Drill Matrix.

Foundation of MTPs

d. Drills are based on the training principles listed in FM 25-100 and FM 25-101. Drills must support collective tasks or task steps identified in the T&EO of the MTP from which they are developed.

1-5. Automated Systems Approach to Training

Introduction

a. The Army's Automated Systems Approach to Training (ASAT) system supports total Army training information management, development, and support. Its capabilities include total task management and production of limited battle focused training and training products.

Capabilities

b. ASAT provides the user the capabilities to:

- Create, modify, and manage standard tasks and link tasks to products, references, unit types, and missions.
- Create organizational charts, further allowing the user to produce mission/echelon relationships that are exportable to other systems. For example, you can relate an organization to it's missions, to it's collective tasks, to the supporting individual tasks, and training support products.
- Operate with pre-loaded information, which can be modified.
- Originate information not in pre-loaded form.
- Link information from a designated TOE, Unit Type to mission, BOS, echelon, training products, references, doctrine, to collective tasks.
- Link collective tasks to individual tasks.

Products

ASAT produces Mission Training Plans and Drill Books. ASAT will provide all the appropriate interfaces for graphics, word processing, and CD-ROM for total product development and production.

Applicability With This Pamphlet

c. This pamphlet provides format, procedures, and the numbering systems for MTPs, Drill Books, and training and evaluation outlines (T&EOs) found in ASAT. For further reference on content and use of ASAT, see Users Guide, Automated Systems Approach to Training.

Chapter 2

Producing MTPs

2-1. Chapter Overview

Introduction

a. Producing an MTP involves:

- Designing and developing T&EOs, training exercises, mission outlines, and collective training matrixes.
- Integrating these items into a training document that provides specific guidance for a TOE unit or combined arms operation.

How to Produce an MTP

b. Follow these steps to produce an MTP.

Step	Action	See Paragraph
1	Research documentation/informational sources for preparing: T&EOs, training exercises, mission outlines, and collective training matrixes: •Review the mission and collective task analysis documentation/informational sources.	2-3
2	Prepare a T&EO for each collective task: •Identify common collective tasks for. T&EO development. •Review task performance specifications for writing the T&EOs. •Write the T&EOs. •Number the T&EOs. •Revise the T&EOs if required.	2-4 Through 2-10
3	Prepare sample training exercises to support the mission training requirements: •Determine the type of exercises to develop. •Design the training exercise. •Develop the training exercise. •Revise the training exercise, if needed.	2-11 Through 2-17
4	Prepare mission outlines: •Determine the components of each mission outline from task analysis. •Construct the mission outlines in a graphic format.	2-18 Through 2-21
5	Prepare collective training matrixes: •Determine matrixes to prepare. •Construct the matrixes.	2-22 Through 2-26

Continued on next page

2-1. Chapter Overview, (Continued)

How to Produce an MTP

b. (Continued)

Step	Action	See Paragraph
6	Prepare draft of the MTP: •Number the MTP. •Write the chapters. •Prepare the initial graphics. •*Assemble the draft. •*Type the draft. •*Edit and format the draft. •*Prepare the draft for printing. •*Staff the draft. •Revise the draft.	2-27 Through 2-30 ------- 4-1 Through 4-6
7	Prepare a CRC of the MTP: •Prepare the CRC for publication. •Review the CRC. •Submit CRC to the appropriate board (DRAG or IPR), for additional review. •Mail the CRC to ATSC for printing.	4-7
8	Maintain the current MTP production documentation: •Obtain the documents to be maintained. •Label the documents. •File the documents throughout production.	4-8

*These procedures are addressed in Chapter 4 and Appendix E.

Section I

Documentation/Information Sources for Review

2-2. Section Overview

Introduction

a. The first effort in producing an MTP is to research source material for preparing:

- T&EOs.
- Training exercises.
- Mission outlines.
- Collective training matrixes.
- The draft.

This section identifies specific source material to review, provides procedures for researching source material, and provides procedures to determine if an MTP will be the publication medium for drills.

In This Section

b. This section covers the types of documentation/informational sources to review.

2-3. Types of Documentation/Informational Sources to Review

Introduction

a. Researching information for preparing T&EOs, training exercises, mission outlines, collective training matrixes, and the draft MTP involves using different types of sources.

Focus of collective task Research

b. Focus your research on the mission analysis documentation, documentation, and Army publications

Types of Sources

c. This chart helps to identify specific sources to review.

Type	Sources
Mission Analysis Products	•Mission analysis data. •Critical mission list. •Approved collective task list.
Collective Task Analysis Products	•Collective task performance specifications. •Potential individual task inventory list. •Drill candidates list. •Proponent task list. •System Training Plans (STRAPs). •Basis of Issue Plans (BOIPs).
Army Publications	•Field manuals. •Army regulations. •TRADOC regulations. •TRADOC pamphlets. •Center for Army Lessons Learned documents •Technical manuals. •Training circulars. •Soldier Training Publications. •Table(s) of Organization and Equipment (TOE).

Field Manuals

d. Field manuals are the primary doctrinal reference for the employment of the subject organization. Those to review may include but are not limited to:

- FM 25-100, Training The Force.
- FM 25-101, Battle Focused Training.
- Field Manuals that deal with the subject, branch, or area that the MTP is developed.

Army Regs

e. Army regulations to review may include but are not limited to AR 25-30, The Army Integrated Publishing And Printing Program.

TRADOC Regs

f. TRADOC regulations to review may include TR 350-70, Training Development Management, Processes, and Products and TR 25-30, Preparation, Production and Processing of Armywide Doctrinal and Training Literature (ADTLP).

Section II

How to Prepare Training and Evaluation Outlines

2-4. Section Overview

Introduction

a. To prepare T&EOs, review pertinent information in the task performance specifications for inclusion in T&EOs and transfer information into the T&EO format. Prepare and format a T&EO by echelon for every collective task identified during mission analysis. ASAT provides an automated tool for T&EO development.

Procedure

b. Follow these steps to prepare T&EOs.

Step	Action	See Paragraph
1	Review information for writing the T&EOs.	2-5
2	Write the T&EOs.	2-6 & 2-7
3	Number the T&EOs.	2-9
4	Identify common T&EOs.	2-10

2-5. T&EOs

Definition: T&EOs

a. T&EOs are part of the Army Training and Evaluation Program mission training plan which provides collective tasks, conditions, and performance standards. These form the basis for training, internal evaluations, and formal external evaluations.

T&EO Format

b. This table lists the components of the T&EO format and their purpose in the order they would appear.

Component	Purpose
Element	Identifies the organizational echelon(s) or element(s) for which the T&EO is developed.
Task	Identifies the collective task title and number from the approved collective task list and the applicable references for the task. Primary reference is listed first and underlined. If only one reference is listed it is not underlined.
Iteration	Trainers identify the number of times the task is performed during training exercises. When an "M" is listed in the iteration line, it means the task can be trained in MOPP4. If an "M" is listed, at least one iteration must be trained in MOPP4 even if the use of NBC is not included as a factor in the "Conditions" statement.
Commander/ Leader Training Assessment	Unit leaders assess the unit's ability to accomplish the task to wartime standards. Leader circles either "T" for trained, "P" for practice, or "U." for untrained.
Conditions	Describes the situation or environment in which the unit performs the task.
Task Standards	Describes the overall task outcome that must be met for successful execution of the task. Identifies risk management design controls for safety and prevention of fratricide.
Task Steps	Provides the sequential steps or actions that are required to perform the task. Includes risk assessment and implementation of safety and fratricide prevention controls.
Performance Measures	Describes how well the task step must be performed.
Go/No-Go	Trainers or evaluators use this during evaluation to record the results achieved during the execution of each task step. Results are recorded using a "GO" and "NO-GO" rating scale.

Continued on next page

2-5. T&EOs, (Continued)

T&EO Format

b. (Continued.)

Component	Purpose
Task Performance/ Evaluation Summary Block	Used during evaluations to record the total number of task steps and performance measures evaluated, those evaluated as a "GO," and the units overall training status as a "GO" or "NO-GO."
Supporting Individual Tasks	List the individual tasks, number and title grouped by STP; and/or other appropriate task list.
OPFOR Tasks and Standards	List OPFOR task and standards to use with the T&EO, which will confront the unit being trained/evaluated with a realistic battlefield scenario. The task and standards should be general and descriptive in nature, not prescriptive. OPFOR is not to be given "canned" missions that will result in their being quickly defeated by the unit being trained/evaluated.

Safety Guidelines

c. Safety statements will be included in the Task Step and Performance Measures. They identify safety requirements and environmental considerations identified during task analysis. The following is an example of the safety statements and the definition of each one:

DANGER

Notice should alert users to the possibility of immediate death or permanent injury. Although damage to equipment may occur, the major concern is the probability of death or permanent injury if the warning is ignored.

WARNING

Notice should alert users to the possibility of immediate personal injury or damage to equipment.

CAUTION

Notice should alert users to the possibility of personal injury or damage to equipment that may result from long-term failure to follow correct procedures.

2-6. How to Write T&EOs

Introduction

a. The T&EO format standardizes the type of information included in T&EOs. In addition, most of the information you use for writing T&EOs comes from the task performance specifications. ASAT provides an automated tool for T&EO development.

Procedure

b. Follow these steps to write a T&EO. See paragraph 2-7 for an example.

Step	Action
1	Select a task.
2	Review existing T&EOs.
3	Review the applicable collective task performance specifications for the T&EO being prepared, and pertinent references needed to perform the task.
4	Determine from task analysis whether risk management and assessment are required for force protection, safety, or fratricide prevention.
5	Transfer data from the collective task performance specification worksheet under the appropriate topic heading.
6	Enter the supporting individual tasks under SUPPORTING INDIVIDUAL TASKS.
7	Determine if opposing forces (OPFOR) tasks are appropriate.
8	Select/develop OPFOR tasks and standards.

2-7. Guidelines for Writing T&EOs

Introduction

a. This paragraph contains guidelines for transferring information from the collective task performance specifications into the formatted T&EOs and for completing each T&EO.

Guidelines

b. Follow these guidelines to write the T&EOs.

No.	Item	Guidelines
1	Element	•Enter the organizational echelon or element from the task performance specifications. •Capitalize each word in the element title.
2	Task	•Enter task title. •Enter task number in parentheses. •Select primary and supporting references from the task performance specifications. Primary reference is listed first and underlined. If only one reference is listed it is not underlined. •Capitalize each word in the task title.
3	Iteration	•Write the numbers 1 through 5 after ITERATION. If some iterations of the task are to be performed in MOPP, write the letter "M" after the number 5. If all iterations of the task are to be performed in MOPP, write the letter "M" after each number. •Include the word "circle" in parentheses after the number 5, M, or 5M. •ASAT provides MOPP4 information based on an ASN code assigned during task analysis: 1 2 3 4 5 (circle) (not performed in MOPP4) 1 2 3 4 5 M (circle) (some iterations should be performed in MOPP 4) 1M 2M 3M 4M 5M (circle) (every iteration of this task should be performed in MOPP4)
4	Commander/ Leader Assessment	•Write the letters "T" for trained, "P" for practice, and "U" for untrained and the word "circle" in parentheses after COMMANDER/LEADER ASSESSMENT.

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2-7. Guidelines for Writing T&EOs, (Continued)

Guidelines

b. (Continued.)

No.	Item	Guidelines
5	Conditions	•Enter a condition statement from the collective task performance specifications. •Indicate in the last sentence of the conditions statement whether or not the task must be performed under MOPP conditions. •Based on the code assigned, ASAT provides the correct statement: ▪"This task should not be trained in MOPP4." ▪"Some iterations should be performed in MOPP4." ▪"This task is always performed in MOPP4."
6	Task Standard	•Enter the task standard from the task performance specifications. •Include any specific differences caused by MOPP conditions for those tasks that must be trained under MOPP conditions. •Include specific reference to risk management for tasks that include planning or implementation of controls for safety or force protection.
7	Task Steps and Performance Measures	•List the task steps and performance measures from the performance specifications. •If the task step is: ▪A leader task then an asterisk is used before the task step number. It begins with an action verb. ▪A drill then the manual or the MTP appendix in which the drill appears , and the drill number should be identified in parentheses following the task step. ▪Performed in MOPP4, the performance measures must include any specific difference. • Performance measures must: ▪Begin with an action verb. ▪Be written as action phrases and listed in their order of accomplishment. ▪Include only one event per measure, and be observable and measurable. ▪Include reference to the planning or implementation of safety and fratricide prevention controls if appropriate. -References to task steps may be listed by each task step. -Graphics, through ASAT, may be embedded within Task Steps and Performance Measures to illustrate task step.

Continued on next page

2-7. Guidelines for Writing T&EOs, (Continued)

Guidelines

b. (Continued.)

No.	Item	Guidelines
8	GO/NO-GO Column	•Locate the "GO" and "NO-GO" to the right of the task steps.
9	Task Performance /Evaluation Summary Block	•Include these subheadings: ▪ITERATION. ▪TOTAL TASK STEPS EVALUATED. ▪TOTAL TASK STEPS GO. ▪TRAINING STATUS GO/NO-GO. •Match the ITERATION line under the task performance/evaluation summary block with the ITERATION line under the task title.
10	Supporting Individual Tasks	•List the individual task numbers and task titles. •TRADOC Common Core has replaced MQS/OFS. However, continue to use MQS publications and tasks, as they are, until Common Core training products are fielded.
11	Opposing Forces	•If an OPFOR task is applicable, then: ▪Develop a task and standards that specify the overall OPFOR performance for the collective task. ▪The OPFOR task standards must specify what must be accomplished, not how it must be done. •If an OPFOR task is not applicable, the heading OPFOR TASKS AND STANDARDS is included in the table. The word NONE in parentheses is inserted under the heading.

Note: Capitalize all topic headings.

2-8. Example of a T&EO

ARTEP 10-417-30-MTP

ELEMENT: QUARTERMASTER PETROLEUM PIPELINE AND TERMINAL OPERATING COMPANY

TASK: PERFORM RADIOLOGICAL DECONTAMINATION (10-2-0207) (FM 3-5, FM 3-4)

ITERATION	1	2	3	4	5	M	(Circle)
COMMANDER/LEADER ASSESSMENT				T	P	U	(Circle)

CONDITIONS: The company area is contaminated by radiological fallout. Battalion OPORD and company TSOP are available. NBC 3 and OEG have been provided by the S2/S3 Section. External NBC decontamination support is requested in coordination with the S2/S3 Section. The Quartermaster Petroleum Pipeline and Terminal Operating Company is assigned to an independent corps petroleum group. This task may be performed under all environmental conditions during the day or night. The company is operating in an arid environment. Threat is capable of conducting NBC, ground, or air attack. Some iterations should be performed in MOPP4.

TASK STANDARDS: Company decontaminates personnel and equipment to within the designated negligible risk level established by the S2/S3 Section.

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO
1. Company performs basic skills decontamination procedures. a. Starts basic soldier skill procedures within 15 minutes of indications of contamination. b. Employs basic soldier skill procedures per the company TSOP. c. Disposes of contaminated dust and articles per prescribed techniques in company TSOP and battalion OPORD. 2. Company performs hasty vehicle and equipment decontamination procedures a. Starts procedures within 30 minutes of indications of contamination, if mission permits. b. Employs hasty vehicle and equipment decontamination procedures per battalion OPORD and company TSOP. c. Disposes of contaminated dust and water per prescribed techniques in the company TSOP.		

Continued on next page

2-8. Example of a T&EO, (Continued)

ARTEP 10-417-30-MTP

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO
*3. Commander directs resumption of operational mission. a. Directs elements to perform assigned mission as specified by the battalion OPORD and commander's guidance. b. Monitors unit radiation status in coordination with each subelement to ensure compliance with battalion commander's OEG. c. Forwards radiation status updates to the S2/S3 Section. d. Coordinates replenishment of NBC decon items with the S4 Section.		

"*" Indicates a leader task step.

TASK PERFORMANCE/EVALUATION SUMMARY BLOCK							
ITERATION	**1**	**2**	**3**	**4**	**5**	**M**	**TOTAL**
TOTAL TASK STEPS EVALUATED							
TOTAL TASK STEPS "GO"							
TRAINING STATUS "GO/NO-GO"							

SUPPORTING INDIVIDUAL TASKS

Reference	Task Number	Task Title
STP 21-I-MQS	01-5030.00-1007	Decontaminate Your Skin and Personal Equipment.
STP 21-II-MQS	04-5030.00-2007	Supervise Unit Response to Nuclear Attack or Radiological Hazard.
	04-5030.00-2020	Supervise Nuclear, Biological, or Chemical Decontamination.
STP 21-1-SMCT	031-503-1007	Decontaminate Your Skin and Personal Equipment Using An M258A1 Decontamination Kit.

OPFOR TASKS AND STANDARDS

(None)

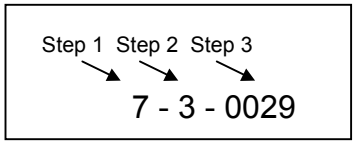
2-9. How to Number T&EOs

Introduction

a. T&EOs are numbered for identification and for Armywide automation of MTP production in ASAT.

Diagram

b. This is an example of a platoon T&EO number:



Procedure

c. Follow these steps to number a T&EO.

Step	Action	Example
1	Assign the proponent identification number to the first two digits: •If the proponent has a single digit identifier use only one number. •If the proponent has a double digit use both numbers. Note: Proponent numbers are found in Appendix G.	The Infantry School will use "7." The Signal School will use "11."
2	Assign the echelon identification number to the third digit.	1-Battalion (Squadron). 2-Company (Troop, Battery, Detachment). 3-Platoon. 4-Squad/Section. 5-Crew/Team. 6-Brigade (Group, Regiment). 7-Division. 8-Corps.
3	Assign the task identification number to the last four digits.	Task identification numbers range from 0001-9999.

2-10. Common and Shared Collective Task T&EO Development

Introduction

a. Some T&EOs developed by a proponent may apply to another proponent's MTPs, or to different echelon/TOE units within the proponent's authority. These The two different types of T&EOs are common and shared. They are defined as follows:

- Common Collective Task is a task that applies to all units in the Army. The task, conditions, task standards, task steps, and performance measures do not change.
- Shared Task is a task that may apply to some units that have different proponents or apply to different echelon/TOE units within a proponent's authority. The task, conditions, task standards, task steps, and performance measures do not change.

Purpose

b. Common and shared collective task T&EOs are developed to:

- Decrease the training development time.
- Provide standardized training across the Army.

Principle

c. If the task, conditions, task standards, or task steps and performance measures are changed, even if they are minor, a new number must be given by the proponent changing the T&EO. Changing any portion of these elements of a T&EO creates a different task.

How to Identify, Number, and Use Common Collective T&EOs

d. Common collective tasks are developed and updated by proponent agencies, but identified by HQ TRADOC as being common throughout the Army. The number remains the same as that originally given by the proponent, except the last four digits begin with a "C," followed by three numbers (for example, "Perform Unit Graves Registration Operations" 10-2-0318 would be numbered 10-2-C318). HQ TRADOC will annually update the list and circulate it to all proponents in the Army. Proponents that use these tasks in their MTPs will simply add the task as it exists without any changes in format, number, or subject matter. Proponents that have authority over common collective tasks must notify HQ TRADOC of modifications and changes made in these tasks.

How to Identify, Number, and Use Shared Collective T&EOs

e. Shared collective tasks are developed, numbered, and updated by preparing proponents. If the T&EO is to be used with no changes :

- For a parallel echelon MTP (for example, company to troop) within the preparing proponent's authority, then use the same T&EO number.
- For multiple echelon MTPs (for example, platoon and company) within the preparing proponent's authority, then the highest echelon is specified in the T&EO number.
- By another proponent agency (for example, a chemical T&EO used in an artillery MTP) then the number assigned by the preparing proponent is used.

Section III

How to Prepare Training Exercises

2-11. Section Overview

Introduction

a. Using the T&EOs, design sample training exercises appropriate to the organizational echelon of the MTP, and then develop them. Later, when preparing an initial draft of the MTP, you incorporate the fully developed training exercises into Chapter 4.

Procedure

b. Follow these steps to prepare training exercises.

Step	Action	See Paragraph
1	Determine the types of exercises to develop.	2-14
2	Design the training exercise.	2-15
3	Develop the training exercise.	2-16
4	Obtain approval for the training exercise, if required.	2-16
5	Revise the training exercise, if needed.	4-6

2-12. Training Exercises

Introduction

a. Collective training exercises are a method of training that involves the use of a maneuver, operation, or series of drills. They are used in units to train teams or units to accomplish their combined arms and service missions on the battlefield. Exercises provided within the MTP serve only as an example/ guide for trainers. Leaders are encouraged to modify or create exercises that best suit their element, TDA, TOE, or MTOE. Higher echelon elements, such as groups, brigades, divisions, and corps will seldom be assembled with all supporting elements and sections for training in a "live" environment. However, these large elements will normally train in a virtual and/or constructive simulation environment. The individual commands should tailor their exercises as necessary. Identification of staff element capabilities or expected actions are as critical to the commander as is participation in an actual exercise.

Key Exercise for MTP

b. The key types of training exercises that must appear in MTPs are situational training exercises (STXs) and field training exercises (FTXs).

Characteristics: STX & FTX

c. This table lists the characteristics of an STX and an FTX.

Type	Characteristics
STX	•Provides preconstructed, bite-sized, short-term exercises that are central to sustainment training for tactical mission proficiency. (Trains smaller component tasks of a mission or missions.) •Supports training at company, platoon, and staff section levels. •Provides leaders with a method to train using doctrinally approved tactics and techniques. •Are more flexible than drills. •Prepares units for lager scale exercises. •May be conducted like a CFX.
FTX	•Higher level exercise used by company or battalion to train to their mission proficiency. (Trains an entire mission or missions.) •Conducted under simulated combat conditions. •Integrates total force in realistic battle functions. •Encompasses battle drills, crew drills, and collective tasks. •Involves combat arms, CS, and CSS units. •Used to train the commander, staff, subordinate units, and slice elements.

Other Exercises

d. This table lists the other types of exercises and their characteristics.

Type	Characteristics
Command Field Exercise (CFX)	•Can be high or medium cost/overhead depending on available resources. •Trains leaders and staff on weapons integration such as intelligence; fire support; slice integration combat service support; rear area operations; and command, control, and communications.

Continued on next page

2-12. Training Exercises, (Continued)

Other Exercises

d. (Continued.)

Type	Characteristics
Command Post Exercise (CPX)	•Medium cost, medium overhead. •Trains commander and staff to lead and control tactical operations by using tactical communications systems.
Live Fire Exercise (LFX)	•High cost, high overhead. •Employs organic and supporting weapon systems using full service ammunition. •Provides realistic training in such areas as fire control and distribution, weapons not used in other exercises, or safety awareness.
Fire Coordination Exercise (FCX)	•Medium cost, medium overhead. •Trains the combined arms team chain of command and related fire control elements to rapidly synchronize fires on the battlefield.
Logistical Coordination Exercise (LCX)	•Medium cost, medium overhead. •Provides leaders with a valuable, hands-on opportunity to deal with combat related challenges such as transportation, maintenance, and graves registration.
Map Exercise (MAPEX)	•Low cost, low overhead. •Portrays military situations on maps and overlays. •Requires a minimum number of support personnel. •Excellent training tool before conducting other, more costly exercises.
Tactical Exercise Without Troops (TEWT)	•Low cost, low overhead. •Conducted on actual terrain with unit leaders and staffs, without soldiers.
Decision Making Exercise (DMX)	•Low cost, low overhead. •Improves dialog, understanding, and teamwork between commanders, subordinate commanders, and staffs. •Used to brainstorm rough contingency courses of action in response to conditions which could arise during and operation.

For Additional Information

e. See FM 25-101, Battle Focused Training, and FM 25-101, Training the Force, for additional information on training exercises.

2-13. Training Exercise Format

Introduction

a. There is a standardized format for writing training exercises. Be familiar with the format and the content requirements to prepare training exercises.

Formats

b. Formats for FTXs and STXs are generally the same. See Appendix B, Chapter 4, for an example of an STX format; and Appendix D, Chapter 4, for an example of an FTX.

FTX Components

c. This table lists the components of the FTX format and their purposes in the order they would appear.

Heading	Identify the proponent, type, title of exercise, and number.
Objective	Describe "who" and "what" the exercise is designed to train.
Interface	Provide a list of the next higher echelon FTX(s) and the supporting elements or units STX(s).
Training Enhancers	Provide specific information for using the FTX for training and provide a sample scenario for training.
General Situation	Provide general information concerning the unit and its training environment.
Special Situation	Provide specific information from higher headquarters or the unit's commander.
Support Requirements	Provide a listing of those items required to conduct the exercise. If it is a battalion or higher echelon MTP, the support requirements would be a statement that says the support requirements are the consolidated requirements of the battalion headquarters and all its subordinate units.
T&EO Sequence	Provide a listing of T&EO task titles and page numbers in the chronological sequence in which they are executed in the course of the exercise.

STX Components

d. This table lists the components of the STX format and their purposes in the order they would appear.

Heading	Identify the proponent, type, title of exercise, and number.
Objective	Describe "who" and "what" the exercise is designed to train.
Interface	Provide a list of titles and identify the applicable supporting STX (company for battalion MTP and platoon for company MTP) and supporting subordinate unit's drills (platoon for company MTP and squad for platoon MTP). Include habitually attached, supported, and supporting unit's STXs, if available, which may be trained in conjunction with this STX.

Continued on next page

2-13. Training Exercise Format, (Continued)

STX Components

d. (Continued.)

Training	•Provide leader training information and training tips. •Provide specific information for using the STX for training and provide a sample scenario for training.
General Situation	Provide general information concerning the unit and its training environment.
Special Situation	•Provide sample fragmentary order (FRAGO) from unit commander. •Provide specific information required for the exercise from higher headquarters not given in the FRAGO
Support Requirements	Provide a listing of those items required to conduct the exercise.
T&EO Sequence	Provide a listing of T&EO task titles and page numbers in the chronological sequence in which they are executed in the course of the exercise.

2-14. How to Determine Types of Exercises to Develop

Introduction

a. Before designing training exercises, determine the types of exercises to develop. This action becomes a preliminary design step. Combined Arms Strategies (CAT), addresses training specific tasks in terms of an optimal mix: computer assisted training exercises vs. live training. The optimal mix consists of live, constructive, and virtual mediums. Proponents should be mindful that as new technologies become available it may be more effective to develop and conduct training in a virtual environment.

Development Considerations

b. To determine the types of training exercises to develop, consider:

- The echelon level of the unit.
- The unit's missions.
- The training requirements for the echelon.
- The type(s) of training exercises (FTX, STX, CFX, CPX, and so on), needed to meet the echelon requirements.
- Unit access to virtual training mediums or simulators.

Principles

c. When determining types of exercises to develop, keep these principles in mind:

- At a minimum, all MTPs contain at least one STX for each organizational mission. (This provides leaders with sufficient clarity and detail to develop additional STXs.)
- At a minimum, a company and higher level MTP must contain one or more fully developed FTX for a critical mission identified for the unit. (This provides leaders with sufficient clarity and detail to develop additional FTXs.)

Procedure

d. Follow these steps to determine the types of exercises to develop.

Step	Action
1	Verify the target audience for which the MTP is being developed for. •Confirm the echelon level. •Confirm the type of unit.
2	Select tasks to include in training exercises. •Review the mission analysis data. •Review collective task performance specifications. •Verify the unit's missions. •Confirm the tasks that support the unit missions.
3	Group the tasks into candidate training exercise by mission. •Select logical task groupings for each mission. •Cross-reference the groupings with the mission matrix to ensure all tasks have been included in an exercise.

Continued on next page

2-14. How to Determine Types of Exercises to Develop, (Continued)

Procedure

d. (Continued.)

Step	Action
4	Select a training exercise strategy for each task grouping. •Review the types of training exercises in FM 25-101. •Identify a strategy. •Review the target audience description to ensure the selected strategy is appropriate to the target audience.

Use of Key Exercises

e. This table reflects the normal use of key types of exercises by echelon.

Type	Battalion and Higher Echelon	Company	Platoon and Lower Echelon
FTX	*Used when training permits	*Used when training permits	Used under company or battalion control
STX	Seldom used	*Frequently used	*Extensively used
CPX	Used extensively	Seldom used	Never used
CFX	Frequently used	Occasionally used	Seldom used
LFX	Used when training permits	Sometimes used	Often used
DMX	Used when training permits	Used when training permits	Used when training permits

*Must appear in the MTP of that echelon. All others are optional.

2-15. How to Design Training Exercises

Introduction

a. Designing training exercises involves starts with the identification of the training objectives to be achieved. Once the objectives are established, specific information to include in the exercise can be identified.

Procedure for STXs

b. Follow these steps to design STXs.

Step	Action
1	Determine training objectives. •Verify the collective tasks (including the T&EOs, candidate battle drills, supporting individual and leader tasks) that make up the candidate STX.
2	Determine if any candidate STXs can combine into one. •Examine the candidate STX. •Compare the tasks which make up the STX. •Identify the significant differences between them: ▪If the STXs appear to be different but only one component distinguishes between them, then only one STX needs to be developed. ▪If the tasks within the STXs appear to be the same but are executed differently for different missions, then combining the STXs would be inappropriate.
3	Determine resource requirements to support the STX.
4	Integrate threat information into the STX.
5	Identify if OPFOR will be applicable.
6	Outline the STX.

Procedures for FTXs

c. Follow these steps to design FTXs.

Step	Action
1	Determine if the FTX can be executed as part of the parent MTP. •Determine training objectives. •Review the tasks in the mission-to-collective task matrix. •Review FTXs in the parent MTP.
2	Determine resource requirements to support the FTX.
3	Determine related subordinate training requirements and other information.
4	Design sample operation orders (battalion and higher echelon units only).
5	Develop a general scenario for each mission outline.
6	Outline the FTXs.

Continued on next page

2-15. How to Design Training Exercises, (Continued)

Procedures for CPXs, CFXs, and LFXs

d. Follow these steps to design CPXs, CFXs, DMXs, and LFXs.

Step	Action
1	Determine training objectives and review the collective tasks.
2	Review the parent and proponent FTXs and STXs.
3	Design sample operation orders.
4	Develop a general scenario for each mission outline.
5	Design graphics and illustrations.
6	Outline the CPXs, CFXs, DMX, and LFXs.

2-16. How to Develop Training Exercises

Introduction

a. Developing training exercises involves writing detailed descriptions of how a collective task (or group of related collective tasks,) is trained. The detailed descriptions include information on required preliminary training, suggested scenario, support requirements, and T&EOs used for evaluation. This information is essential to plan and manage training in units.

Procedure

b. Follow these procedures to develop a training exercise.

Step	Action
1	Select an exercise to write.
2	Format a layout of the exercise. •Review the training exercise content. •Make the appropriate layout with the topic headings in the correct sequence.
3	Write the heading. Include the: •Unit name. •Title of the exercise. •Sequential mission outline identification number.
4	Write the objective(s).
5	Write an interface paragraph.
6	Write the training section. Include: •Guidance on leader training. •Tips for leader training. •Training enhancers. •The general scenario, with FRAGO or OPORD from the next higher level.
7	Write the support requirements. List: •Number and type of equipment. •Number of observer controllers. •Number and type of OPFOR. •Type and size of training area. •Ammunition if required. •Fuel required. •Training aids/devices if required. •Rations if required.
8	Compile a list of the T&EOs addressed in the exercise, sequencing them in the order they are executed.
9	Prepare supporting graphics and illustrations.

Obtaining Approval

c. After completing the training exercises, submit them to the appropriate approving authority.

Continued on next page.

2-16. How to Develop Training Exercises, (Continued)

Guidelines

d. Follow these guidelines when developing STXs and FTXs.

Type	Guidelines
STX	•Use appropriate threat tactics and techniques to create realistic training. Note: If an objective of an STX is to train a unit to breach a minefield, the setup instructions and illustrations should depict a typical threat minefield that a unit is likely to face in combat. Similarly, if OPFOR is employed, OPFOR instructions should focus on current threat information. •Before writing the STX review the STX outline for appropriate doctrine and support information. •Perform doctrinal review. •Ensure the appropriate training support information is provided. •Reconcile and identify supporting tasks with published doctrinal requirements. (For example, if doctrine requires that a report be submitted, then include the report with the STX.) •Support the STX with detailed illustrations that support current doctrine.
FTX	•If only one FTX is developed for an MTP, then it should be for the most complex mission. •Ensure that the FTX can fit into an FTX contained in the MTP developed for the parent unit.

For More Information

e. See Appendix B for an example of an STX. See Appendix D for an example of an FTX.

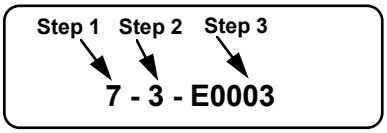
2-17. How to Number Sample Training Exercises

Introduction

a. Sample training exercises are numbered for identification and for Armywide automation of MTP production.

Diagram

b. This is an example of a sample platoon training exercise number:



Procedure

c. Follow these steps to number a sample training exercise.

Step	Action	Example
1	Assign the proponent identification number to the first two digits: •If the proponent has a single digit identifier use only one number. •If the proponent has a double digit use both numbers. Note: Proponent numbers are found in Appendix G.	The Infantry School will use "7." The Signal School will use "11."
2	Assign the echelon identification number to the third digit, or the second digit in the case of single digit proponents.	1-Battalion (Squadron). 2-Company (Troop, Battery, Detachment). 3-Platoon. 4-Squad/Section. 5-Crew/Team. 6-Brigade (Group, Regiment). 7-Division. 8-Corps.
3	Assign the exercise identification number to the last five digits: •Begin with the letter "E" to identify the number as being an exercise. •Followed by a four digit sequential number	Task identification numbers range from E0001-E9999.

Section IV

How to Prepare Mission Outlines

2-18. Section Overview

Introduction

a. Preparing the mission outline involves compiling lists of candidate STXs with their supporting T&EOs and drills, and portraying them graphically. Later, you incorporate these outlines into Chapter 3 of the MTP.

Procedure

b. Follow these steps to prepare mission outlines.

Step	Action	See Paragraph
1	Review the missions listed in Chapter 1.	2-19
2	Identify the task listing for each STX.	2-19
3	Construct the mission outlines in a graphic format.	2-21

2-19. Mission Outlines

Definition: Mission Outlines

a. Mission outlines are graphic portrayals of the relationship between critical wartime missions and the supporting tasks inherent in those missions.

Purpose

b. Mission outlines facilitate the planning and management of training at the unit level by providing a commander with a visual outline of the unit's critical missions at his level.

Mission Outline Preparation

c. Prepare mission outlines for all platoon, company, and battalion wartime missions, using the same general format. List each supporting task in a general flow pattern through the planning, preparation, and execution of a mission. The task list and relationships can then be used to construct training exercises to support training for those missions.

Mission Outline Format

d. This table describes the content required for the mission outline format. See example in paragraph 2-20.

No.	Item	Description of Content
1	Heading	Identifies the proponent, unit type, and the critical mission.
2	Subheading	Next higher level exercise title and number (if any) supported by the STXs.
3	Column 1, 2, 3, etc.	•List each supporting STX title and number. •List supporting T&EOs and drills below the STX.

2-20. Example of a Mission Outline

The example below provides a mission outline which indicates the relationship between a company level FTX and the supporting platoon STXs. It also indicates the relationship between the platoon STXs and their supporting T&EOs and drills.

INFANTRY PLATOON
MISSION OUTLINE
ATTACK

FTX
Deliberate Attack
7-2-E0001

STX Occupy Assembly Area 7-3-E0001	STX Passage of Lines (Forward) 7-3-E0002	STX Assault a Known Position 7-3-E0003
Occupy Assembly Area 7-3-1002	Prepare for Combat 7-3-1046	Perform Actions at Danger Area 7-3-0010
Prepare for Combat 7-3-1046	Perform Passage of Lines 7-3-1025	Employ Fire Support 7-3-0019
Move Tactically 7-3-1025	Move Tactically 7-3-1025	Breach an Obstacle 7-3-0021
React to Contact 7-3-D001	React to Ambush 7-3-1014 7-3-D003	Execute Assault 7-3-0022
Consolidate and Reorganize 7-3-1047	Break Contact 7-3-1002	Enter/Clear a Trench 7-3-D007

2-21. How to Construct Mission Outlines

Introduction

a. After determining the components of the mission outlines, display the components in a graphic format.

Procedure

b. Follow these steps to construct a mission outline.

Step	Action
1	Select a critical mission for which to construct an outline.
2	Review the mission outline format.
3	Determine the heading of the mission outline. •Verify the unit name. •Verify the critical mission. •Verify the title and number of supported exercise (if any).
4	Write the heading. For example: INFANTRY PLATOON MISSION OUTLINE ATTACK FTX Deliberate Attack 7-2-E0001
5	Line the STXs as column headings. For example: STX Occupy Assembly Area 7-3-E0001
6	List for each STX the collective tasks and drills inherent in each.
7	Verify that the list for each STX agrees with paragraph 8 of each specific STX.

Section V

How to Prepare Collective Training Matrixes

2-22. Section Overview

Introduction

a. Preparing collective training matrixes involves identifying matrixes to construct, compiling information for the matrixes, and then displaying the information graphically.

Procedure

b. Follow these steps to prepare collective training matrixes.

Step	Action	See Paragraph
1	Determine matrixes to prepare.	2-25
2	Compile necessary information.	2-26
3	Construct the matrixes.	2-26

2-23. Collective Training Matrixes

Definition

a. Collective training matrixes are graphic portrayals of collective training data that show an organized set of relationships between missions, collective tasks, leader tasks, and/or individual tasks. They are designed to aid leaders in planning training and identifying required resources.

Types of Training Matrixes

b. There are two types of training matrixes for the MTP: required and optional.

Required for the MTP:

- Mission-to-Collective Task Matrix (only required for units with two or more missions).

Example types of optional matrixes for the MTP:

- Individual Task-to-Drill Matrix.
- T&EO-to-Individual Task Matrix.
- Platoon Collective-to-Crew Collective Task Matrix.
- Publication-to-Collective Task Matrix.

Components of a Matrix

c. This table lists the generic components of a matrix and their purpose.

No.	Component	Purpose
1	Title	Identifies the type of matrix.
2	Headings	Summarizes the information in the body.
3	Body	Displays sets or a grouping of tasks under the headings.

Mission-to-Collective Task Matrix

d. This table lists the components of a Mission-to-Collective Task Matrix and their purpose.

No.	Component	Purpose
1	Title	Identifies the type of matrix.
2	Headings	Identifies mission.
3	Body	Displays sets or a grouping of tasks under the headings.

2-24. Example of a Collective Training Matrix

	Mission						
Collective Tasks And T&EO Number	Movement To Contact	Attack	Raid	Ambush	Recon And Security	Defend	Retrograde
Maneuver							
Assault 7-3-1001	X	X	X			X	X
Overwatch/Support By Fire 7-3-1007	X	X	X			X	X
Disengage 7-3-01008	X	X	X	X		X	X
Knock Out Bunker 7-3-1012	X	X	X				
Clear Trench Line 7-3-01015	X	X	X				
Perform Raid 7-3-1015			X				
Fire Support							
Employ Fire Support 7-3-1006	X	X	X	X	X	X	X

Note: See Appendix B for an example of a Mission-to-Collective Task Matrix.

2-25. How to Determine Matrixes to Prepare

Introduction

a. When deciding to prepare a particular training matrix for the MTP, consider whether it is required or optional. The decision is also influenced by the echelon level and the number of missions for that unit.

Procedure

b. Follow these procedures to determine the type of matrixes to prepare for each MTP.

Step	Action
1	Verify the echelon level of the MTP.
2	Verify that the unit has two or more missions.
3	Identify the required and optional matrixes to include in the MTP.

2-26. How to Construct Matrixes

Introduction

a. To construct a matrix, first compile information to include in the matrix. This involves researching the matrix topics and identifying specific information to include in the matrix.

Type of Sources to Review

b. To compile specific information for matrixes, focus research on:

- Mission analysis documentation (mission, mission matrixes, and so on).
- Collective tasks performance specifications.
- Mission outlines.
- Training exercises.

Procedure

c. Follow these steps to construct a collective training matrix.

Step	Action
1	Select a matrix to construct.
2	Compile information for the matrix. •Determine type of matrix (required or optional). •Review source material applicable to the matrix type. •Gather information for including in the matrix.
3	Prepare the matrix. •Determine the format based on type of matrix. •Write the title. •Determine the main headings and subheadings. •List information under the subheadings. •Divide sets or groups of information.
4	Cross reference the draft matrix with the following elements. •T&EO for correct titles, numbers and individual task titles and numbers. •BOS definitions to ensure tasks are located under the correct BOS. •Mission outline to ensure the task numbers under the STXs agree with the task numbers listed under the missions (Mission-to-Collective Task Matrix). •Training exercises to ensure the tasks listed in these exercises agree with the tasks listed under the STXs in the matrix (Mission-to-Collective Task Matrix).

Note: If matrixes are not required in the MTP, write: "Not Applicable" after Chapter 2 in the Table of Contents. If matrixes are used, they must be simplistic and user friendly.

Section VI

How to Prepare a Draft MTP

2-27. Section Overview

Introduction

a. Section I through V presents the procedural steps for designing an MTP. This section addresses the procedural steps for preparing a draft MTP.

Description of Preparing a Draft

b. The draft of an MTP is a draft of the final product and includes draft illustrations. The process of preparing a draft involves numbering the MTP writing the chapters, writing the front and back matter, editing the draft, and staffing it for review.

When to Prepare a Draft MTP

c. A draft MTP is prepared after meeting the following conditions:

- Mission analysis and collective task analysis completed.
- T&EOs, training exercises, mission outlines, and collective training matrixes prepared.

Getting started

d. To produce a complete and well written draft, carefully review the MTP format, writing guidelines, and any regulations or pamphlets pertaining to writing, including:

- DA Pam 600-67, Effective Writing for Army Leaders.
- DA Pam 310-20, Administrative Publications: Action Officers Guide.
- TRADOC Pam 350-5, Effective Staff Writing.
- TRADOC Pam 350-8, U.S. Army Training and Doctrine Command Primer.
- TRADOC Reg 350-70, Training Development Management, Processes, and Products.
- TRADOC Reg 25-30, Preparation, Production and Processing of Armywide Doctrinal and Training Literature (ADTLP).

Procedure

e. Follow these steps to prepare a coordinating draft of an MTP.

Step	Action	See Paragraph
1	Number the MTP.	2-29
2	Write the chapters.	2-30
3	Construct the graphics.	2-30
*4	Assemble the draft.	4-2
*5	Edit the draft.	4-3
*6	Prepare the draft for printing.	4-7
*7	Staff the draft.	4-5

*These steps are addressed in Chapter 4 and Appendix E.

2-28. MTP Format

Introduction

a. There is a standardized format for MTPs with specific components. Be familiar with the format and its components to prepare MTPs.

MTP Components

b. This table lists the components of the MTP format and their purpose in the order they would appear in an MTP.

Component	Purpose
*Cover	Identifies the MTP number, the title of the MTP, and issuing headquarters.
*Table of Contents	Lists the chapter titles, section titles, appendixes, and page numbers.
*Preface	Provides a brief opening comment or introductory remark regarding the MTP.
Chapter 1, Unit Training	Provides an explanation and the organization of the MTP, and explains how to use it in establishing an effective training program.
Chapter 2, Training Matrixes	Provides collective training matrixes which show the relationship between missions and collective tasks as a minimum.
Chapter 3, Mission Outlines (Company and below) Chapter 3, Training Plans (Battalion and above)	Provides mission outlines and sample exercise information useful in developing plans to train units and soldiers in the missions and tasks required in combat. For appropriate level headquarters, it includes information on training the HHC, HHB or HHD. At battalion level and higher the chapter is titled "Training Plans" and provides additional information on resources plus short and long range planning.
Chapter 4, Training Exercise	Provides training exercises which combine with leader training activities to assist in training critical missions and tasks.
Chapter 5, Training and Evaluation Outlines	Provides the training criteria for tasks that must be mastered to perform the critical missions.
Chapter 6, External Evaluation	Provides instructions for the planning, preparation, and execution of an external evaluation.
Appendixes	Provides additional or supplemental information on a subject covered in the MTP. See paragraph 2-31, "Guidelines for Writing MTPs" for specific guidance on the topics and lettering of the appendixes for different echelons.
Back Matter	Include glossary of acronyms and abbreviations used in the MTP, a list of references used throughout the MTP, a questionnaire, and an authentication page.

*See paragraph 4-2 for further guidance.

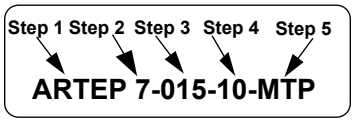
2-29. How to Number the MTP

Introduction

a. MTPs are numbered for identification and for Armywide automation of MTP production.

Diagram

b. This is a diagram of an MTP number:



Procedure

c. Follow these steps to number an MTP:

Step	Action	Example
1	Assign the publication medium "ARTEP."	See above.
2	Assign the proponent identification number to the first two digits: •If the proponent has a single digit identifier use only one number. •If the proponent has a double digit identifier use both numbers. Note: Proponent numbers are found in Appendix G.	The Infantry School will use "7." The Signal School will use "11."
3	Assign the TOE number to the next three digits. If the MTP involves more than one TOE, use the lowest TOE number to number the MTP.	See above.
4	If the TOE is below the battalion level, then add a two digit organization identifier (for each MTP with the same TOE increase identifier by one number): • 10-29: platoon or sections. • 30-39: company or detachment. • 40-59: office, branch or division. • 60-79: unique organizational requirements.	See above
5	Assign the designator "-MTP" after the last number.	See above.

2-30. How to Write the Chapters

Introduction

a. To write the MTP, know the procedures for writing the chapters. In addition, they must know the topics and content requirements for each chapter. ASAT provides an automated tool for customized MTP development.

Procedure

b. Follow these steps.

Step	Action
1	Confirm the echelon level of the unit MTP.
2	Review the sample MTP (see Appendix B) or an existing MTP developed under current policy.
3	Identify information that is appropriate to the unit MTP.
4	Identify information that needs modification.

Chapter 1

c. This table lists the topics in Chapter 1 and their requirements, in the order they would appear in an MTP.

Topic	Requirement
General	Explain the purpose for the MTP.
Supporting material	Explain use of the MTP as a training and evaluation tool. Include an MTP echelon relationship diagram.
Contents	Explain organization of the MTP.
Missions and tasks	Identify the missions and describe the training plan.
Principles of training	Explain the principles of training in FM 25-100, Training the Force.
Training strategy	Explain the Army's Combined Arms Training Strategy (CATS) and the integration of the MTP with CATS.
Conducting training	Explain how to plan, prepare, and conduct unit training.
Force Protection (Safety)	Explain risk assessment and safety requirements or concerns to prevent fratricide.
Environmental Protection	Explain environmental assessment and any environmental requirements or concerns.
Evaluation	Define the evaluation types and explain how to conduct them.
Feedback	Provide a statement on recommendations for improvements.

Chapter 2

d. This table lists the topics in Chapter 2 and their requirements in the order they would appear in an MTP. The topics and requirements for developing matrixes are found in paragraph 2-23.

Topic	Requirements
General	Explain the purpose for training matrixes.

Continued on next page.

2-30. How to Write the Chapters, (Continued)

Chapter 2

d. (Continued.)

Topic	Requirements
Training matrix	Describe each training matrix and incorporate the appropriate training matrix graphic after each description.

Chapter 3

e. This table lists the topics in Chapter 3 and their requirements in the order they would appear in an MTP. It is focused on the battalion level and above MTPs. For company level and below, only the first and last topics are required.

Topic	Requirement
General	Explain the purpose for training plans.
Long-range planning	Explain the purpose for long-range planning. Provide procedures for developing unit METL and a sample METL, for training assessment and sample assessment, and for establishing priorities.
Short-range planning	Provide procedures for short-range planning.
Near-term planning	Provide procedures for near-term planning.
Training the HHC	Provide procedures for training the HHC, HHB or HHD.
Developing training exercises	Provide procedures for the battalion staff to use for FTX preparation and for battalion supporting STX.
Mission outlines	Provide a picture of the relationships between missions and collective tasks and sample exercises that support mission training.

Chapter 4

f. This table lists the topics in Chapter 4 and their requirements in the order they would appear in an MTP.

Topic	Requirement
General	Explain the purpose for training exercises.
Field training exercises (FTXs)	Explain the purpose for FTXs if they are included in the MTP.
Situational training exercises (STXs)	Explain the purpose for STXs.

Continued on next page.

2-30. How to Write the Chapters, (Continued)

Chapter 4

f. (Continued.)

Topic	Requirement
Other Training Exercises	Explain the purpose for other types of training exercises, if they are included in the MTP. These types of exercises are: •CFX. •CPX. •LFX. •DMX. •FCX. •LCX. •MAPEX. •TEWT.
Table of Training Exercises	List the training exercises included in the MTP and incorporate fully developed training exercises after the listing.

Note: The topics and requirements for developing exercises are found in paragraph 2-12.

Chapter 5

g. This table lists the topics in Chapter 5 and their requirements in the order they would appear in an MTP.

Topic	Requirement
General	Provide an overview of the chapter contents.
Structure	Explain the arrangement of the T&EOs.
Format	Explain the T&EO format.
Usage	Explain the T&EOs role in the training process and incorporate the T&EOs.
T&EOs	Provide T&EOs

Note: The topics and requirements for developing T&EOs are found in paragraph 2-5.

Chapter 6

h. This table lists the topics in Chapter 6 and their requirements for company level and below in the order they would appear in an MTP.

Topic	Requirement
General	Explain the purpose for evaluations and an overview of the evaluation process.
Preparing the evaluation	Provide guidance on preparing for an evaluation (such as preparing an evaluation instrument, forecasting and requisitioning resources, selecting and preparing a field evaluation site).
Selecting the observer controller	Provide guidance on selecting observer controllers (such as knowledge needed, minimum rank, and experience for OCs).

Continued on next page

2-30. How to Write the Chapters, (Continued)

Chapter 6

h. (Continued.)

Topic	Requirement
Training the observer controllers	Provide guidance on training OCs in the areas of evaluation design, the MILES system, and the evaluation control system.
Recording external evaluation information	Explain the responsibilities for developing data recording instruments.
Selecting and training OPFOR	Explain the criteria for selecting OPFOR, knowledge needed, and OPFOR strength (offense and defense).
Conducting the evaluation	Provide guidance for conducting an evaluation (the pre-evaluation, evaluation, and post-evaluation).
Conducting the after action review	Provide guidance on the AAR (such as purpose, preparing the AAR, and conducting an AAR).

Chapter 6

i. This table lists the topics in Chapter 6 for battalion level and above and their requirements for battalion level and above in the order they would appear in an MTP.

Topic	Requirement
General	Explain the purpose for evaluations and provide an overview of the evaluation process.
Preparing the evaluation	Provide guidance on preparing for an evaluation and a sample evaluation scenario.
Resource requirement and planning considerations	Explain resource requirements and planning considerations.
Selecting and training OCs	Provide procedures for selecting and training OCs.
Selecting and training OPFOR	Provide procedures for selecting and training OPFOR.
Conducting the evaluation	Provide guidance for conducting an evaluation.
Recording external evaluation information	Explain the responsibilities for developing data recording instruments
After action reviews	Provide guidance on the AAR process.

Note: For more information on training evaluation, see Chapter 5 of FM 25-100, Training the Force and Chapter 5 of FM 25-101, Battle Focused Training.

Constructing Supporting Graphics

j. After writing the chapters, prepare graphics to clarify the chapter content.

- Determine the graphic requirements.
- Develop the graphics (tables, charts, diagrams, illustrations, etc.).
- Edit the graphics.
- Establish the placement of the graphics within the text.

2-30. How to Write the Chapters, (Continued)

Example MTP

k. See Appendix B, Sample Mission Training Plan, for an example of the MTP chapters. See Appendix D for an example of Chapters 3, 4 and 6 of a battalion level MTP. For guidelines on writing the chapters, see the next page.

2-31. Guidelines for Writing MTPs

Introduction

a. Follow the same general procedures to write MTPs for platoons and companies as for battalion or higher echelons. However, there are certain guidelines that are only applicable to a specific echelon. Be familiar with these guidelines to produce MTPs that are appropriate for the different echelons.

Guidelines

b. Follow these guidelines when writing MTPs.

Item	Guidelines
Table of contents	If matrixes are not required in the MTP, then write: "Not Applicable" after the Chapter 2 title. Be sure to insert a page where Chapter 2 would normally be placed, stating "Chapter 2, Not Applicable."
Chapter 1	When preparing the MTP echelon relationship diagram, you may list supporting STPs and drill books.
Chapter 2	When listing the collective tasks under the appropriate Battlefield Operating System (BOS), the order for listing is: intelligence, maneuver, fire support, mobility and survivability, air defense, combat service support, and command and control. When incorporating the mission-to-collective task matrix in the MTP, ensure: •The relationship of collective tasks to missions is shown for all collective tasks developed as T&EOs in Chapter 5. •The collective tasks are only listed under the applicable BOS as identified in TRADOC Pam 11-9, since all seven systems may not apply to each type unit and echelon. •Each task is listed only under its primary BOS.
Chapter 4	When developing training exercises, paragraph number the exercise components in numerical order. See appendix B for an example.
Chapter 5	List the T&EOs in a table according to their specific BOS.
Appendixes	• Use appendixes to provide proponent specific information not provided in the chapters (such as additional training for normally attached units and resource requirements). •For company and lower echelon MTPs: •If drills and an exercise OPORD are included in the MTP, they are listed in Appendixes A and B respectively. Appendix C through Z lists information deemed necessary by the proponent.

Continued on next page

2-31. Guidelines for Writing MTPs, (Continued)

Guidelines

b. (Continued.)

Item	Guidelines
Appendixes (Continued)	▪If only drills or and exercise OPORD are included in the MTP, it is listed in Appendix A. Appendix B through Z lists information deemed necessary by the proponent. Note: It may be necessary to add a Combined Arms Training Strategy to MTP's below Battalion level, as for example in an MTP for a separate Company. It is at the proponents discretion. •For battalion and above echelon MTPs: ▪Appendix A is Combined Arms Training Strategy. ▪Appendix B is Exercise OPORDS. ▪Appendix C is Threat Analysis. ▪Appendix D through Z list information deemed necessary by the proponent.

For More Guidance

c. See Appendix D to help clarify the degree of information needed in Chapters 3, 4 and 6 of battalion and higher echelon MTPs.

Chapter 3

Producing Drill Books

3-1. Chapter Overview

Introduction

a. Producing a drill book involves developing collective tasks or task steps into drills and compiling them into a training document.

Drills in MTPs

b. If the number of drills are small and relate to the specific MTP TOE unit(s), the drills should be added to the MTP as Appendix A or published under a separate cover at the discretion of the proponent.

How to Produce a Drill Book

c. Follow these steps to produce drill books.

Step	Action	See Paragraph
1	Prepare the drills. •Examine the drill candidates. •Determine the type of drill to develop for each candidate. •Obtain proponent approval of drill candidates. •Verify the appropriate cues for each drill. •Develop drill instructions. •Develop supporting illustrations. •Write the drill. •Validate the drill. •Number the drill.	3-2 Through 3-13
2	Prepare the individual task-to-drill matrix. •Verify the drills developed. •Verify individual tasks that make up each drill. •Identify the individual tasks to be trained before each drill can be performed. •Identify the individual tasks to be trained during each drill. •Construct a matrix to show the training requirements of the individual tasks in relation to each drill.	3-14 Through 3-16
3	Prepare a draft of the drill book. •Number the drill book. •Write the chapters. •Prepare the graphics. *•Assemble the draft. *•Type the draft.	3-17 Through 3-20 ---- 4-1 Through 4-6

Continued on next page

3-1. Chapter Overview, (Continued)

How to Produce a Drill Book

c. (Continued.)

Step	Action	See Paragraph
3	(Continued). *•Edit the draft. *•Validate the draft. *•Prepare the draft for printing. *•Staff the draft. •Revise the draft.	4-1 Through 4-6
4	Prepare a CRC of the drill book. •Prepare the CRC for printing. •Review the CRC. •Submit CRC to the appropriate board (DRAG or IPR), for additional review. •Mail the CRC to ATSC for printing.	4-7
5	Maintain the drills/drill book production documentation. •Obtain the documents to be maintained. •Label the documents. •File the documents throughout production.	4-8

*These procedures and steps are addressed in Chapter 4 and Appendix F.

Section I

Drills

3-2. Section Overview

Background

a. Drills originate from the collective tasks or task steps identified during the collective task analysis phase of collective training development. Whether they are developed into drills depends on the:

- Relative criticality of the collective tasks or tasks steps.
- Frequency with which they are performed.

Definition

b. Drills are disciplined, repetitious exercises to teach and perfect a skill or procedure. They are linked to MTPs in that they are a method for executing a collective task or task step.

Purpose

c. Drills are an integral part of the unit support training strategy. They are designed to:

- Focus on a limited number of key actions that every like unit in the Army must master.
- Provide standardized actions that link soldiers and collective tasks at platoon level and below.
- Provide soldiers and units with the skills and knowledge to fight and win in any environment.

General Characteristics of Drills

d. Drills are:

- Largely mission, enemy, troops, terrain and weather, and time available (METT-T) independent.
- Executed with minimal leader action.
- Initiated on a cue.
- Performed the same every time.

Advantages of Drills

e. Drills reduce the need for unnecessary orders, save time, and allow the leader to concentrate on assessing the situation from which all subsequent actions flow.

In This Section

f. This section introduces the knowledge needed to prepare drills and covers the following topics:

Topic	See Paragraph
Types of Drills.	3-3
Drill Formats.	3-4
Example of a Battle Drill.	3-5
Example of a Crew Drill.	3-6
Types of Drill Instructions.	3-7

3-3. Types of Drills

Introduction

a. Be familiar with the types of drills and their characteristics in order to prepare effective drills.

Types of Drills

b. The two key types of drills are battle and crew. Candidate tasks from the task list must meet the characteristics of one of the drill types for drill development.

Characteristics

c. This table classifies the key types of drills and identifies their characteristics.

Drill Type	Characteristics
Battle	A collective action that involves units in fire and/or maneuver, and is: •Generally executed by a platoon or smaller element. •Executed without the application of a deliberate decision-making process. •Vital to success in combat or critical to preserving life. •Initiated on a cue, such as a leader's order. •A trained response to the given stimulus. •Accomplished with minimal leader orders. •Standard throughout like units in the Army.
Crew	A collective action that involves the actions of a section, team or crew on a specific piece of equipment, and is: •Performed repeatedly in combat or to preserve life. •A trained response to a given stimulus of the weapon or equipment. •Accomplished with minimal leader orders. •Initiated on a cue, such as a leader's order. •Standard throughout the Army.

3-4. Drill Formats

Introduction

a. There is a standardized format for each drill type (battle and crew). Become familiar with the components (topics) and formats (topic sequence) in order to prepare drills in the proper format.

Battle vs. Crew Drill Format

b. The formats for battle and crew drills are similar with the same topics covered. However, in the crew drill format the sequencing of topics and the treatment of illustrations are different.

Drill Components

c. The drill format consists of the following components:

- Task.
- Conditions.
- Standards.
- Supporting Individual Tasks.
- Illustrations.
- Setup Instructions.
- Talk-Through Instructions.
- Walk-Through Instructions.
- Performance Measures.
- Coaching Points.
- Run-Through Instructions.
- Perform.
- Supported Training and Evaluation Outlines.

Purpose of Components

d. This table lists the components and their purpose, in the order they would appear in drill, and any differences between the battle and crew drill formats.

No.	Component	Purpose
1	Task	Identify the specific work behavior.
2	Conditions	Describe the situation/environment in which the unit will perform the task and the initiating cue.
3	Standards	Describe the required outcome when executing the drill.
4	Supporting Individual Tasks	Refer the drill trainer to the individual task-to-drill matrix or lists the applicable supporting individual tasks.
5	Illustrations	Clarify how the drill should be executed or supplements the performance measure.
6	Setup Instructions	Describe the drill resources, training site, and unit instructions for conducting the drill.
7	Talk-Through Instructions	Describe how to state and demonstrate the actions that make up the drill.
8	Walk-Through Instructions	Describe how to perform the drill at a reduced speed.

Continued on next page

3-4. Drill Formats, Continued

Purpose of Components

d. (Continued).

No.	Component	Purpose
9	Performance Measures	Describe the observable behavior the soldiers must perform. Text format is preferred method for listing performance measures, with duty position identifiers (using ASAT). Table format is an additional method proponents may use.
10	Coaching Points	Clarify and expand on the performance measures. Instructions for drill leaders on actions or techniques soldiers should use to perform particular tasks.
11	Run-Through Instructions	Describe how to practice the drill.
12	Perform	Describe when to evaluate drill performance.
13	Supported T&EO	Refers the trainer to the appropriate collective task-to-drill matrix or lists the appropriate supported collective tasks.

For More Guidance

e. See paragraph 3-5 and 3-6 for an example of a battle drill and a crew drill. Paragraph 3-5 is an example of a drill that refers trainers to an individual task-to-drill matrix and a collective task-to-drill matrix. Paragraph 3-6 is an example of a drill that lists the supporting individual tasks and supported collective tasks within the body of the drill. For an example of a drill format that shows what the members of an element are doing simultaneously, see Appendix C.

Safety Guidelines

f. Safety statements will be included in the Performance Measures. They identify safety requirements and environmental consideration identified during task analysis. The following is an example of the safety statements and the definition of each one:

DANGER

Notice should alert users to the possibility of immediate death or permanent injury. Although damage to equipment may occur, the major concern is the probability of death or permanent injury if the warning is ignored.

WARNING

Notice should alert users to the possibility of immediate personal injury or damage to equipment.

CAUTION

Notice should alert users to the possibility of personal injury or damage to equipment that may result from long-term failure to follow correct procedures.

3-5. Example of a Battle Drill

Battle Drill

TASK: Move from column to wedge formation while moving mounted.(7-4-D001)

CONDITIONS: Moving in a column formation, the platoon leader commands his track commanders, "Move into the wedge formation".

STANDARDS: The platoon moves from a column to a wedge formation within 1 minute, without slowing forward cross-country speed.

SUPPORTING INDIVIDUAL TASKS: See Appendix A, Individual Task-to-Drill Matrix.

I**LLUSTRATIONS**: See Appendix B, Moving From Column to Wedge Formation.

SETUP INSTRUCTIONS:

a. Resources.

(1) Platoon APCs.

(2) Flag set (one green and one yellow flag).

(3) APC vehicle models from DUNN-KEMP game (optional).

b. Training Site. Cross-country area 1000 x 2000 meters trafficable by APCs.

c. Unit instructions. The platoon is moving in column formation mounted. The platoon leader allows the platoon to move approximately 400 meters before issuing his order to move into the wedge formation. Track commanders and squad members have been assigned sectors of fire.

TALK-THROUGH INSTRUCTIONS:

a. Orientation. The objective of this battle drill is to rapidly move into the wedge formation without slowing forward cross-country speed. During tactical operations the terrain and enemy situation will dictate changes in mounted formations. The platoon's ability to react rapidly to these changes is critical to its success on the battlefield.

b. Safety/Fratricide. Drivers briefed to employ safe cross-country driving procedures. Terrain and weather related hazards associated with the cross-country movement are identified. Techniques to avoid identified hazards and accidents are briefed.

c. Demonstration (optional). Demonstrate how the squads move from column to wedge formation using the APC models from the DUNN-KEMP game.

d. Explanation. Use the performance measures as a guide and in your own words, explain the actions of each squad. Illustrate with a sketch, sand table, or simple diagram drawn in the dirt. Answer all questions about the battle drill. Have the platoon sergeant, squad leaders, track commanders, and drivers explain their parts in the battle drill.

WALK-THROUGH INSTRUCTIONS: Move from column to wedge formation while moving mounted.

a. Form a platoon column on foot, with the platoon sergeant, squad leaders, track commanders and drivers representing their vehicles and walk through the battle drill. Practice changing from column to wedge formation, keeping distance and lateral separation.

Continued on next page

3-5. Example of a Battle Drill, (Continued)

b. Form the mounted column and conduct the battle drill, starting slowly and increasing the speed with each iteration until the standards are met.

c. Initiating cue. With the platoon moving in a mounted column, the platoon leader commands his track commanders, "Move into the wedge formation."

PERFORMANCE MEASURES:

1. Platoon leader's (PL) track commander executes the flag signal for the wedge formation.
2. Track commanders (TC) relay the platoon leader's flag signal (Figure 5-3).
3. PL maintains appropriate cross-country speed with his APC.
4. Platoon sergeant (PS) moves his APC on line with and 50-100 meters to the right and of PLs.
5. 1st squad leader moves his APC (1) to a position 50-100 meters to the left and rear of the PLs APC and on line with the 3rd squad (Figure 5-3).
6. 3rd squad leader moves his APC (3) to a position 50-100 meter to the right and rear of the PSs APC and on line with the 1st squad (1) (Figure 5-3).
7. TCs traverse caliber .50 machine guns toward assigned sectors.
8. Squad members orient their weapons on assigned sectors.

COACHING POINT: Squad leaders caution squad members to avoid aiming their weapons at friendly vehicles and personnel when the platoon is moving into wedge formation.

RUN-THROUGH INSTRUCTIONS: The soldiers should practice this drill until they can perform the drill according to the standard without the drill book. The initial run-through should be conducted slowly. The soldiers should change positions in order to learn all steps and standards.

PERFORM: When the soldiers can perform this drill according to standard, they should be evaluated by the platoon or section leader.

SUPPORTED TRAINING AND EVALUATION OUTLINES: See Figure 5-2, Collective Task-To-Drill Matrix.

3-6. Example of a Crew Drill

Crew Drill

TASK: Emplace the Avenger system (hasty or deliberate) and prepare for action. (44-4-D012.)

CONDITIONS: Vehicle is moving, and the driver commands the gunner, "Emplace and prepare for action. All components of the system are available and operable. The area is secure. The area provides adequate space for emplacing the system and easy access.

STANDARDS: In a nonchemical environment or in MOPP 1 or 2, the squad must emplace and prepare the Avenger for action within 5 minutes and 30 seconds. In MOPP 3 or 4, the squad must emplace and prepare the Avenger for action within 7 minutes.

SUPPORTING INDIVIDUAL TASKS:

Manual Title	Tasks Number	Task Title
STP 44-14S14-SM-TG	441-066-1150	Plot fire unit's position and early warning information on MSCS
	441-092-2001	Select firing position.
	113-587-2064	Operate radio set AN/VRC-12 or AN/VRC-47 with TSEC/KY-57
	441-092-1035	Operate intercommunications set AN/VIC-1.
	441-092-1011	Perform driver/observer duties during emplacement.
	441-092-1012	Perform gunner duties during emplacement.

ILLUSTRATIONS: None.

SETUP INSTRUCTIONS:

a. Resources;

(1) One Avenger with BII.
(2) Stinger missiles, caliber .50 machine gun, and ammunition. For training use captive flight trainers and dummy ammunition.
(3) Individual weapons, NBC equipment, and protective clothing.

b. Training Site. The site should allow good observation (both air and ground), fields of fire, and communications.

c. Unit instructions. Squad is moving and approaching its new position. The system is in the ENGAGE mode and ready to shoot on the move during movement. RCU POWER ON switch is on. The OPORD has provided current PTL and SOF. The task is to emplace the Avenger system and prepare for action. The squad is not expected to remain in the location for very long.

TALK-THROUGH INSTRUCTIONS:

a. Orientation. Before beginning the drill training ensure that each squad member knows the purpose of the drill and is briefed on safety awareness.

b. Safety/Fratricide. The squad must be extremely cautious at all times when climbing into or out of the turret or vehicle cab, especially during wet weather. The ARM switch will remain in the SAFE position to prevent accidental firing of the machine gun.

Continued on next page

3-6. Example of a Crew Drill, (Continued)

c. Demonstration (optional). If another squad has successfully performed the drill, have that squad demonstrate the drill. Describe its actions using the performance measures as a guide. After the demonstration, summarize.

d. Explanation. The drill leader should tell the squad what their duties are in the drill. Read the performance measures for the drill and have the squad members explain their performance measures to ensure that they understand them. Ensure that the RCU POWER switch is in the ON position.

WALK-THROUGH INSTRUCTIONS:

a. The squad leader should conduct the walk-through slowly at first. Correct any mistakes the squad members make as they go. Do not proceed until the drill is done right. After the squad members demonstrate their proficiency at a slow pace, let them do it faster. Remember, however, that safety is never sacrificed for speed. Watch carefully to make sure the squad members achieve all of the standards for the drill.

b. Initiating cue. The driver commands, "Emplace and prepare for action."

PERFORMANCE MEASURES:

1. Driver halts the vehicle with the rear of the vehicle facing the PTL and commands "Emplace and prepare for action." Gunner acknowledges command by replying "Roger." Driver places the gear shift lever to neutral and sets the parking brake. Driver shuts engine off or leaves running, as required.

2. Driver commands, "Gunner monitor radio net." Gunner replies, "Roger," and switches radio net, monitors radio, and performs air and ground surveillance. Driver disconnects CVC cable, exits the vehicle, closes the window and door, and pushes the driver's side rearview mirror in.

3. Driver determines magnetic north with a compass. Orients the gunner to magnetic north by using arm-and-hand signals and converts magnetic north to grid north. Gunner uses the keyboard to input magnetic north, PTL, SOF data, and air density information into the CDT.

4. Driver removes the RCU and cable and places them on the ground. Reconnects CVC cable to the RCU. Closes window and door and pushes the passenger's side rearview mirror in.

5. Driver moves the RCU approximately 50 meters to the front of the system that provides the best FOV and concealment.

6. Driver assumes monitoring of the radio net. Gunner returns to monitoring the intercom, begins search of his SOF, and reports "Prepared for action." Driver begins searching SOF not searched by the gunner and goes to step 9.

NOTE: For hasty emplacement, driver and gunner perform steps 7 through 9.

7. Driver connects 50 foot CVC cable to RCU, exits the vehicle, closes the door and window, and pushes the passenger's side rearview mirror in.

8. Driver moves to front of vehicle to a position that provides a good FOV and concealment and orients MSCS map to grid north. Gunner begins search of his SOF and reports, "Prepared for action." Driver begins search of SOF not searched by the gunner.

Continued on next page.

3-6. Example of a Crew Drill, (Continued)

9. Driver notifies the platoon CP, "Emplaced and prepared for action."

COACHING POINT: If needed, correct the soldier after he completes a performance measure. Soldiers complete performance measures in sequence.

RUN-THROUGH INSTRUCTIONS: The soldiers should practice this drill until they can perform the drill according to standard without the drill book. The initial run-through should be conducted slowly. The soldiers should change positions in order to learn all steps and standards.

PERFORM: When the soldiers can perform this drill according to the standard, they should be evaluated by the platoon or section leader.

SUPPORTED TRAINING AND EVALUATION OUTLINES:

ARTEP Number	T&EO	T&EO Task Title
44-117-21-MTP	44-3-7024	Deploy and Occupy Position

3-7. Types of Drill Instructions

Introduction

a. There are specific types of instructions which must be included in drills. Be familiar with these types to prepare drills.

Purpose of Drill Instruction

b. Drill instructions provide the drill trainer with a clear description of "what" and "how" to execute a drill. In addition, clear instructions ensure the drill performance is consistent with each execution.

Types of Instruction

c. This table lists the drill instructions and their purpose, in the order they would appear in a drill. In addition, it identifies and describes the topics for each.

Drill Instructions	Purpose	Topics and Purpose
Setup	Provides instructions for arranging for the drill.	1. Resources: Provides an explanation of the materials required to conduct the drill. 2. Training site: Provides the characteristics of the training area. 3. Unit instructions: Provides instructions for initial placement of unit and special instructions for arranging training.
Talk-Through	Provides instructions on how to describe and demonstrate the actions that make up the drill.	1. Orientation: Provides instructions for presenting the training objective. 2. Safety/Fratricide: Provides instructions for specific safety measures to observe during the drill. 3. Demonstration: Provides instructions for an optional demonstration of the drill by another unit proficient in the drill. 4. Explanation: Provides instructions for explaining the performance measures, using a chalkboard, sand table, piece of equipment, or simple diagram drawn on the ground.

Continued on next page

3-7. Types of Drill Instructions, (Continued)

Types of drill instructions

c. (Continued.)

Drill Instructions	Purpose	Topics and Purpose
Walk-Through	Provides instructions on how to perform the drill at a reduced speed.	1. Specific instructions: Provides instructions for conducting the walk-through. 2. Initiating cue: Provides the event, command, or signal that prompts the execution of the drill.
Run-Through	Provides instructions on how to practice the drill.	Provides specific instructions for practicing the drill.

Section II

How to Prepare Drills

3-8. Section Overview

Introduction

a. In Section I basic information about drills was presented. Section II presents procedural steps for preparing drills.

Drill production process

b. Preparing drills begins with reviewing the collective task analysis documentation and ends upon the completion of the CRC. During this process, develop the approved and numbered drill task candidates, which emerged from the analysis phase, into final written drills.

When to prepare drills

c. Prepare drills after the collective task analysis phase and after the parent MTP has been developed in draft format.

Procedure

d. These are the steps to follow to prepare drills.

Step	Action	See Paragraph
1	Examine the candidate tasks for drill development.	3-9
2	Determine the type of drill to develop for each task.	3-10
3	Number the drill.	3-13
4	Verify the appropriate cue(s) for the drills.	3-10
5	Write the drills.	3-11
6	Validate the drills.	3-12

3-9. How to Examine Collective Tasks for Drill Development

Introduction

a. To prepare drills use the same collective task analysis documentation used to produce the parent MTP. However, examine the documentation for specific task information to build the drills.

What to Examine

b. Examine the following documents or informational sources:

- Collective Task Analysis Documentation for drill candidates list and collective task performance specifications.
- Mission Training Plan for training exercises and individual-to-collective task matrix.

Procedure

c. Follow these steps to examine a collective task for drill development.

Step	Action
1	Verify the drill candidate task. •Review the drill candidate task list. •Confirm the drill candidate task.
2	Verify that the task standard is observable and measurable. •Review the collective task performance specifications. •Examine the task performance specifications (standards, task steps, and performance measures of the candidate drill task).
3	Verify the leader tasks and individual tasks that make up the drill task. •Examine the collective-to-individual task matrix. •Review the leader and individual tasks of the collective task.

3-10. How to Determine Type of Drill to Develop

Introduction

a. Once the drill candidate tasks have been examined, then determine the type of drill to develop for each task.

Principal

b. A drill candidate task must meet one of the two drill definition types (battle or crew) to be developed into a drill, as described in paragraph 3-3.

Procedure

c. Follow these steps to determine the type of drill to develop for a drill candidate task.

Step	Action
1	Verify the echelon level of the candidate task for drill development.
2	Review the leader and individual tasks that make up the drill to ensure they are valid for the drill.
3	Identify the type of drill to develop. •If the drill task is executed by a platoon or smaller element without a deliberate decision-making process to preserve life, then develop a battle drill. •If the drill task is executed by a crew of a weapon or piece of equipment in combat or to preserve life, then develop a crew drill.

Verifying Appropriate Cue for Drills

d. After determining the type of drill to develop, review the collective task performance specifications for the candidate task to:

•Study the initiating cues.
•Confirm whether they are appropriate for the candidate task.

3-11. How to Write Drills

Introduction

a. Section I, Drills, explains the drill formats. These formats standardize the type of information included in drills. Follow the formats to write battle and crew drills.

Procedure

b. Follow these steps to write a drill.

Step	Action
1	Select a drill to write.
2	Format a battle or crew layout for the drill. •Verify type of drill being developed. •Review drill formats for battle and crew drills. •Make the appropriate layout with the topic headings in the correct sequence.
3	Transfer data from the collective task performance specifications under the appropriate topic headings. •Enter the task statement or task step(s) statement under TASK. •Enter the conditions statement under CONDITIONS. •Enter the standards statement under STANDARDS. •List the performance measures under PERFORMANCE MEASURES. Note: If the drill task is a task step or task steps, enter the task step statement as the task or develop a generalized statement if more than one task step is used. Develop the conditions and standard when task steps are used.
4	Enter a statement about supporting tasks under SUPPORTING INDIVIDUAL TASKS.
5	If you are writing a battle drill, enter a statement about illustrations under ILLUSTRATIONS.
6	Enter a statement about supporting tasks under SUPPORTED COLLECTIVE TASKS.
7	Transfer drill instructions into drill format.
8	Enter performance measures.
9	Enter additional leader instructions under COACHING POINTS.
10	Incorporate drill illustrations.

Introduction

c. Follow these guidelines when writing drills.

Item	Guideline
Task	Begin task statements with a action verb.
Conditions	Include the initiating cue for the task in the conditions statement.
Standards	Write a simple, short, clear standards statement. The statement should be dictated by the execution of tasks appropriate to the situation.

Continued on next page.

3-11. How to Write Drills, (Continued)

Introduction

c. (Continued.)

Item	Guideline
Supporting individual tasks	If an individual task-to-drill matrix is used, specify the following phrase to refer the trainer to the individual task-to-drill matrix: "See Figure..."
Illustrations	Provide illustrations whenever possible to help add clarity.
Setup instructions	Verify the instructions clearly define the training site and specific unit instructions.
Talk-through instructions	Verify the instructions clearly define the orientation, safety, optional demonstration of the drill, and explanation of performance measures.
Walk-through instructions	Verify the instructions clearly describe how to perform the drill at a reduced speed and include the initiating cue that prompts the drill.
Performance measures	•Indicate the sequence of the steps through the statements. •Indicate what is to be done in each statement. •State who performs the task.
Run-through instructions	Verify the instructions clearly describe how to practice the drill.
Coaching points	Use coaching points whenever possible to clarify the performance measures.
Perform	Verify evaluation statement.
Supported Training and Evaluation Outlines	If a collective task-to-drill matrix is used, the following phrase is used to refer the trainer to the collective task-to drill matrix: "See Figure..."

3-12. How to Validate Drills

Introduction

a. Validate drills to verify their technical accuracy and effectiveness. For additional information on validation see TRADOC Reg 350-70.

Procedure

b. Follow these steps to validate a drill.

Step	Action
1	Select a drill to validate.
2	Develop a validation plan. •Identify the units. •Determine constraints. •Determine the number of trials. •Identify the events to take place. •Determine method of data collection. •Prepare data collection instruments.
3	Prepare for conducting the validation. •Draft a validation plan. •Make any necessary arrangements for conducting the validation.
4	Conduct the validation. •Collect data to: ‣Verify the technical accuracy. ‣Verify the effectiveness of the drill. •Determine revision requirements.
5	Prepare an Validation Report. •Write validation findings. •Provide recommendations.
6	Revise the drill, as necessary.

Developing the Validation Plan

c. Time and manpower constraints make it difficult to plan the validation of drills. However, plan on conducting at least two to five trials. Within a trial, more than one unit should be used to evaluate the drill before revisions are made. Another way of looking at this trial process is:

Unit 1, Unit 2 } Trial No. 1 **Unit 1, Unit 2 } Trial No. 2**

Unit 1, Unit 2 } Trial No. 3 **etc.**

Conducting the Validation

d. The data collection should focus on determining if the:

•Task steps are technically accurate.
•Drill instructions are technically accurate and operable.
•Unit meets the performance measures.

Continued on next page

3-12. How to Validate Drills, Continued

Preparing the Validation Report

e. Prepare a report that summarizes:

- Procedures used.
- Findings and inferences.
- Recommendations to include the corrections and, if needed, a requirement for revalidation.
- Unforeseen hazardous conditions or situations that occurred and were not part of the risk assessment.

Revising the Drill

f. Revise the drill, if needed, by:

- Reviewing the validation report and the data collected on the trials.
- Identifying changes needed.
- Making the appropriate changes.

3-13. How to Number Drills

Introduction

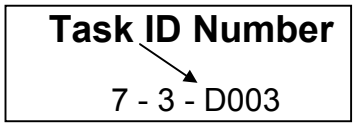
a. The last step in preparing drills is to number them. They are numbered for identification and for Armywide automation of drill production.

Principle

b. Number drills in the same manner as T&EOs. However, the task identification number for drill will begin with a "D." (Task ID numbers range from D001-D999.)

Diagram

c. This is an example of a drill number:



Procedure

d. Follow these steps to number a drill.

Step	Action	Example
1	Assign the proponent identification number to the first two digits: •If the proponent has a single digit identifier then use only one number. •If the proponent has a double digit then use both numbers. Note: Proponent numbers are found in Appendix G.	The Infantry School will use "7." The Signal School will use "11."
2	Assign the echelon identification number to the third digit, or second digit in the case of single digit proponent.	3-Platoon. 4-Squad/Section. 5-Crew/Team.
3	Assign the drill identification number to the last four digits: •Begins with the letter "D" to identify the number as being a drill. •Followed by a three digit sequential number.	Task identification numbers range from D001-D999.

Section III

How to Prepare Individual Task-to-Drill Matrixes for Drill Books

3-14. Section Overview

Introduction

a. After preparing the drills, prepare the individual task-to-drill matrix. This matrix clarifies the relationship of the individual tasks to the drills.

Purpose

b. The individual task-to-drill matrix aids unit commanders in planning training. It helps them to identify which tasks to train before a drill and which to train during a drill.

In This Section

c. This section covers the following topics:

Topic	See Paragraph
How to Develop the Individual Task-to-Drill Matrix	3-15
Example of an Individual Task-to-Drill Matrix	3-16

3-15. How to Develop the Individual Task-to-Drill Matrix

Introduction

a. The content of the individual task-to-drill matrix should be self-explanatory and easy to read.

Procedure

b. Follow these procedures to develop the individual task-to-drill matrix.

Step	Action
1	Verify the drills developed.
2	Verify the individual tasks that make up each drill.
3	Identify the individual tasks to be trained before each drill.
4	Identify the individual tasks to be trained during each drill.
5	Construct a matrix to show the training requirements of the individual tasks in relation to each drill.

Identifying Critical Tasks to Train

c. Use the following criteria to identify tasks to train before and during each drill:

- Train before each drill: These tasks are required preparatory tasks for the conduct of the drill.
- Train during the drill: These tasks are required to perform the drill.

Constructing the Matrix

d. Follow these steps to construct the matrix.

Step	Action
1	Draft the matrix. •Obtain a blank matrix. •Write the title: Individual Task-to-Drill Matrix. •Write the main headings: ▪Write the task title for the column subheadings. ▪Write the drill title for the row subheadings. •Write the subheadings. ▪In the columns under the task title, list the individual tasks. ▪In the rows under the drill title, list the drills. •List information for each drill. ▪Indicate with a "B," those tasks to be trained before the drill. ▪Indicate with a "D," those tasks to be trained during the drill.
2	Cross-reference the draft matrix with the T&EOs to ensure no individual tasks are excluded.
3	Finalize the matrix in the proper format.

Example

e. See next page, Example of an Individual Task-to-Drill Matrix.

3-16. Example of an Individual Task-to-Drill Matrix

Skill Level 1 Individual Task Number and Title	Battle Drills					
	7-3-D001	7-3-D002	7-3-D003	7-3-D004	7-3-D005	7-3-D006
031-503-1004 Protect Yourself From Chemical And Biological Injury/Contamination Using Your M17 Series Protective Mask With Hood					B	
031-503-1007 Decontaminate Skin and Personal Equipment Using An M258A1 Decontamination Kit					B	B
031-5003-12 Protect Yourself From Chemical And Biological Injury/Contamination Using Your M24 or M25-Series Protective Mask With Hood					B	
031-503-1014 Identify Chemical Agents Using M8 Detector Paper					B	
031-503-1015 Protect Yourself From NBC Injury/ Contamination With Mission-Oriented Protective Posture (MOPP) Gear					B	
031-503-1018 React to a Nuclear Hazard					D	D
031-503-1019 React to Chemical or Biological Hazard/ Attack					D	
031-503-1020 Detect Chemical Agents Using M9 Detector Paper					B	
071-311-2007 Engage Targets With an M16A1 or M16A2 Rifle	B	B	B			
071-311-2027 Load an M16A1 or M16A2 Rifle	B	B	B			

B - Trained Before the drill
D - Trained During the drill

Note: If only one drill is produced in the drill book or listed in the MTP annex, a matrix is not required. The supporting individual tasks will be listed in the drill.

Section IV

How to Prepare a Draft Drill Book

3-17. Section Overview

Introduction

a. Section II presents the procedural steps for preparing drills. Section IV presents the procedural steps for preparing a draft of a drill book..

Description of Preparing an Initial Draft

b. The draft of a drill book is simply a draft of the final product and includes draft illustrations. The process for preparing a draft involves numbering the drill book, writing the chapters, incorporating the drills into a chapter, writing the front and back matter of the book, and staffing it for review.

When to Prepare a Drill Book

c. Prepare a drill book after the drills are written and only when it is identified as the publication medium for the drills.

Getting Started

d. Before writing the draft, carefully review the drill format and any writing guidelines. This helps produce a more complete and well written draft.

For Writing Guidance

e. For additional guidance in writing the draft, see the following references:

- DA Pam 600-67, Effective Writing for Army Leaders.
- DA Pam 310-20, Administrative Publications: Action Officers Guide.
- TRADOC Reg 350-70, Training Development Management, Processes, and Products.
- TRADOC Pam 350-5, Effective Staff Writing.
- TRADOC Pam 350-8, U.S. Army Training and Doctrine Command Primer.
- TRADOC 25-30, Preparation, Production and Processing of Armywide Doctrinal and Training Literature (ADTLP).

Procedure

f. Follow these to prepare an initial draft of a drill book.

Step	Action	See Paragraph
1	Number the drill book.	3-19
2	Write the chapters.	3-20
3	Prepare the graphics.	3-20
*4	Edit the draft.	4-3
*5	Validate the draft.	4-4
*6	Prepare the draft for printing.	4-7
*7	Staff the draft.	4-5

*Note: These steps are addressed in Chapter 4 and Appendix F.

3-18. Drill Book Format

Introduction

a. There is a standard format for drill books, with specific components. Be familiar with the format and its components in order to prepare drill books.

Types of Components

b. This table lists the components of the drill book format and their purpose, in the order they would appear in a drill book.

Component	Purpose
*Cover	Identifies the drill book number and the title of the drill book, and gives other information about the drill.
*Table of Contents	Lists the chapter titles, section titles, appendixes, and page numbers.
*Preface	Provides introductory information regarding the drill performance.
Chapter 1	Provides guidance for conducting drill training, to include: •General information. •Training guidance. •Safety considerations. •Evaluation information.
Chapter 2	Provides general information about battle drills and provides the battle drills. Note: If the drill book contains only crew drills they are listed in place of battle drills in this chapter.
Chapter 3	Provides general information about crew drills and provides the crew drills. Note: If the drill book does not contain both battle and crew drills, this chapter is omitted.
Appendixes	•Appendix A contains the individual task-to-drill matrixes. If only one drill is produced in the drill book, or listed in the MTP appendix, a matrix is not required. The supporting individual tasks are listed in the body of the drill. •Appendix B contains a list of illustrations used with the drills. Normally only illustrations used repeatedly in many drills are listed here and referred to within the drills. Illustrations used only once are normally provided in the body of the drill. •Appendixes C through X are used to provide proponent specific information not provided in the chapters. If an appendix is not used to list illustrations, start with Appendix B.
Glossary	Provides explanation of terms and acronyms used in the drill book.

Continued on next page

3-18. Drill Book Format, Continued

Types of Components

b. (Continued.)

Component	Purpose
References	Lists manuals and publications used to develop the drill book or used by the proponent in conjunction with the drill book.

*See paragraph 4-2 for guidance.

3-19. How to Number the Drill Book

Introduction

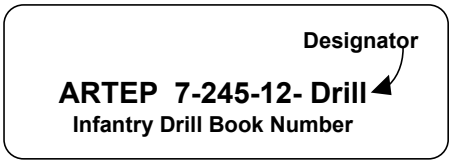
a. Number drill books for identification and for Armywide automation of drill production.

Principle

b. Number drill books in the same manner as MTPs. However, assign the designator "Drill" after the last TOE number.

Diagram

c. This is an example of a drill book number:



Procedure

d. Follow these steps to number a drill book.

Step	Action	Example
1	Assign the publication medium "ARTEP."	See above.
2	Assign the proponent identification number to the first two digits: •If the proponent has a single digit identifier, use only one number. •If the proponent has a double digit identifier, use both numbers. Note: Proponent numbers are found in Appendix G.	The Infantry School will use "7." The Signal School will use "11."
3	Assign the TOE number to the next three digits. If the MTP involves more than one TOE use the lowest TOE number to number the MTP.	See above.
4	If the TOE is below the battalion level, then add a two digit organization identifier (for each drill book with same TOE increase identifier by one number): •10-29: platoon or sections. •30-39: company or detachment. •40-59: office, branch or division. •60-79: unique organizational requirements.	See above
5	Assign the designator "-Drill" after the last number.	See above.

3-20. How to Write the Chapters

Introduction

a. To write the chapters of the drill book, be familiar with the procedures for writing the chapters. In addition know the topics and content requirements of each chapter.

Procedure

b. Follow these steps to write the chapters.

Step	Action
1	Verify the boilerplate information contained in the drill book shell. •Identify the echelon level of the drill book to be developed. •Review the sample drill book (see Appendix C) or an existing drill book. •Identify information that is appropriate to the unit drill book. •Identify information that needs to be modified.
2	Develop the chapters with topic sentences and paragraphs. •Modify standardized parts of the drill book. •Develop the drills for the book.

Chapter 1

c. This table lists the types of topics to include in Chapter 1 and their requirements.

Topic	Requirements
General	Provide an explanation of purpose for drills/drill training, a description of drill(s) used in the drill book, and a list of advantages of drills.
Training	Provide an explanation of training strategy for drills.
Safety	Provide an explanation of safety considerations.

Chapter 2

d. This table lists the types of topics to include in Chapter 2 and their requirements.

Topic	Requirement
Battle drills	Provide the battle drills, separated by echelon (squad and platoon). Note: If the drill book contains only crew drills they are listed in place of battle drills in this chapter.

Chapter 3

e. This table lists the types of topics to include in Chapter 3 and their requirements.

Topic	Requirement
Crew drills	Provide the crew drills, separated by echelon (section and platoon). Note: If the drill book does not contain both battle and crew drills, this chapter is omitted.

Continued on next page

3-20. How to Write the Chapters, (Continued)

Appendixes

f. This table lists the types of topic to include in the appendixes and their requirements.

Topic	Requirement
Appendix A	•General. Provide an explanation of the use and content of the Individual Task-to-Drill Matrix. •Individual Task-to-Drill Matrix. Provide the matrix.
Appendix B	•Provide a list of illustrations, if needed. If illustrations are used repeatedly in many drills place the illustrations in the Appendix. A paragraph describing the illustrations can precede the illustrations.
Appendix C through X	These appendixes can be used to provide proponent specific information not provided in the chapters. If Appendix B is not used for illustrations, start with Appendix B in lieu of C.

Preparing Graphics

f. Prepare graphics to help clarify the chapter content. Prepare graphics by:

- Determining the graphic requirements (does a chapter need a chart to clarify content).
- Developing the graphics (tables, charts, diagrams, illustrations, etc.).
- Editing the graphics.
- Establishing the placement of graphics within the text.

Chapter 4

Completing Production of Draft MTPs and Drill Books

4-1. Chapter Overview

Introduction

a. Drafts of MTPs and drill books must be assembled, validated (drill only), coordinated, and approved for publication and Armywide distribution. ASAT provides an automated tool for customized MTP production.

Chapter Goal

b. This chapter provides the procedures for writing the front and back matter, editing, staffing, and validating (drill only) a draft. It also provides information on submitting it for review, preparing it for publication and approval, and for maintaining production documents. Refer to TRADOC Reg 25-30 for additional information on bookmarking, writing and editing, preparing the preliminary draft, and staffing.

Completing Production

c. These are the procedures to complete the production of a draft and the Camera Ready Copy (CRC).

Step	Action	See Paragraph
1	Complete the preparation of a draft. •Assemble the draft. ▪Sequence the chapters per the MTP or drill book format. ▪Write the front and back matter. •Edit the draft. •Validate the draft (drill only). •Prepare the draft for printing. •Staff the draft. •Review and incorporate valid comments from staffing.	4-1 Through 4-6
2	Prepare a CRC. •Prepare CRC. •Review the CRC. •Submit CRC to the appropriate board (DRAG or IRP), for additional review. •Mail CRC to ATSC for printing.	4-7
3	Maintain the production documentation. •Obtain the documents to maintain. •Label the documents. •File the documents throughout production.	4-8

Authorized Size

d. IAW TRADOC Reg 25-30 authorized publication sizes for an MTP can be: 4 1/8”x6 1/4”, 5 3/8”x8 3/8”, or 8 3/8”x10 7/8”, and for a drill book: 4 1/8”x 6 1/4” or 5 3/8”x8 3/8”. The proponent will have to coordinate with editor on downsizing document, because ASAT can only print 8 3/8”x10 7/8”.

4-2. How to Write the Front and Back Matter

Purpose

a. The front matter gives the reader a general idea of the content, purpose, and the location of information. The back matter gives the reader supplemental information on subjects within the chapters.

Procedure

b. Follow these steps to write the front and back matter.

Step	Action
1	Write the cover page. Record the: •MTP/drill book number. •Title. •Issuing headquarters. •Distribution restriction statement. •Date of publication. •Security classification at top and bottom, if required. •Destruction notices as applicable. •Export-controlled technical data warning notice, as applicable. •Classification authority and downgrading instructions if the MTP is classified. Notes: a. An illustration of a branch or corps insignia may be placed on the cover. An MTP unit equipment or historical reference may also be used. b. Use distribution statement A unless the publication contains information which would be denied if requested under the Freedom of Information Act (refer to AR 25-55).
2	Write the table of contents. List the: •MTP/drill book number in the upper right-hand corner. •Heading "Headquarters, Department of the Army Washington D.C." and the publication date under the MTP/drill book number. •Heading "Army Training and Evaluation Program" with the MTP publication number under it, in the upper left-hand corner. •Preface. •Chapters. •Supporting paragraphs for each chapter. •Appendixes. •Page numbers for each.
3	Write the preface. Write a: •Statement on the purpose. •Statement on the intended audience. Include: ▪Proponent statement. ▪Gender statement.

Continued on next page

4-2. How to Write the Front and Back Matter, Continued

Procedure

b. (Continued.)

Step	Action
4	Prepare the appendices. •If preparing an MTP then prepare: ▪Appendix A, Combined Arms Training Strategy (CATS), in Battalion or higher echelon MTPs. ▪Appendix B, Drills, when they are included in the MTP. ▪A threat appendix in battalion or higher echelon MTPs only. ▪A sample OPORD in Battalion or higher echelon MTPs. •If preparing a drill book then prepare: ▪Appendix A. Individual Task-to-Drill Matrix as. ▪Appendix B, List of Illustrations, when illustrations are not included in the body of the drills. Note: It may be necessary to include appendices for Combined Arms Training Strategy and an Exercise OPORD in Company or lower MTPs, as for a separate Company MTP. It is at the discretion of the proponent.
5	Prepare required back matter. Write: •The glossary. •The reference list. •A questionnaire. •An authentication page.

Guideline

c. You may include proponent peculiar appendices.

4-3. How to Edit

Purpose

a. Edit the MTP or drill book to ensure it is technically accurate, clear, complete, and concise.

Editing the Draft

b. Use this table for assistance with editing.

To edit for...	Action
Content	Edit for accuracy, relevancy of subject matter, and sound technology. •Consult an editor (GS-1082 or 1083 series) for a detailed editorial review. If none are available: ▪Consult a subject matter expert (SME) and/or training specialist familiar with preparing MTPs for the technical accuracy of content and the relevancy of content to collective training. ▪Consult an instructional systems specialist for sound educational technology including: logical sequencing, appropriate transitions, and consistent terminology.
Grammar, punctuation and spelling	Edit the grammar, punctuation, and spelling for the following: •Errors in verb tenses, word use, syntax, and so on. •Errors in punctuation. •Misspellings.
Clarity	Edit for clarity to improve the readability and ensure the writing is at an appropriate reading grade level for the MTP user. (See TRADOC Reg 25-30.)
Internal references	Edit the internal references to verify the: •Titles and page numbers in the table of contents list. •References to figures, appendixes, paragraphs, and page numbers.

4-4. How to Validate the Drill Book

Purpose

a. Validating the drill ensures it achieves its stated purpose in an effective and efficient manner.

When to Validate

b. Validate the drill book with the user in the field before final publication.

Procedure

c. Follow these steps to validate.

Step	Action
1	Develop a validation plan.
2	Prepare for conducting the validation.
3	Conduct the validation.
4	Prepare a validation report.
5	Revise the drill book, as necessary.

Conducting the Validation

d. Focus the data collection on verifying the target audience's ability to use the drill book.

4-5. How to Staff the Draft for Review

Purpose

a. Staffing the draft helps minimize the number of changes at the CRC stage. By staffing, you obtain:

- User (target audience) input.
- Supervisory input and approval.
- Educational soundness input.
- Visual presentation input.

Principle

b. Staff the draft within the school and to selected users in the field, Army schools, and agencies.

Before Staffing

c. Prepare the draft for printing by:

- Making a copy of the draft.
- Preparing a print request for the draft.
- Forwarding the print request and copy of draft to the print plant.

Procedure

d. Follow these steps to staff the draft for review.

Step	Action
1	Prepare a transmittal memorandum.
2	Route the memorandum and enclosure for signature.
3	Pack the draft and transmittal memorandum.
4	Route the packet per distribution guidelines.

4-6. How to Revise the Draft

Introduction

a. Make the draft more complete before publication by revising it and incorporating the staffing comments.

Procedure

b. Follow these steps to revise the draft of an MTP/drill book.

Step	Action
1	Review the staffing comments.
2	Identify appropriate recommendations or comments.
3	Identify comments not appropriate for inclusion.
4	Make the appropriate changes.
5	Write a justification for not incorporating a recommendation or comment.
6	Verify modifications identified during validation were completed (drill only).
7	Revise the graphics, if needed.

4-7. How to Prepare the CRC for Publication

Introduction

a. The last effort is preparing the CRC for publication.

Procedure

b. Follow these steps to prepare the CRC for publication.

Step	Action
1	Revise the draft, if necessary.
2	Prepare the final graphics. •Prepare or coordinate the preparation of the graphics. •Request assistance from a visual information specialist (VIS), if needed. •Establish final placement of graphics within text.
3	Edit the draft and prepare a CRC.
4	DRAG the CRC if required to do so for additional review.
5	Prepare the CRC for reproduction. •Publish two laser print CRC copies. •Proofread the CRC.
6	Forward the CRC and two copies plus the completed DA Forms 260 to ATSC. (see TRADOC Reg 25-30.)

References

c. Refer to TRADOC Reg 25-30, chapter 8, for instructions on producing and processing the CRC.

4-8. Maintaining Production Documentation

Introduction

a. Maintaining production documentation is important to the overall production process. By maintaining significant production documentation, backtracking, lost time, and counterproductive actions are reduced.

What to Maintain

b. This table lists the most important documents to maintain. All other documents would be optional.

IF you are developing	THEN you maintain
an MTP	•A copy of all matrixes and T&EOs. •The comments from staffing. •Copies of the draft and CRC.
a Drill Book	•A copy of the individual task-to-drill matrix. •The original copies of the drills. •The comments from the staffing. •Copies of the draft and CRC. •A copy of the validation instrument and results. •A copy of the validation report. •A current copy of the drill book.

Advantages for Maintaining Documentation

c. Maintaining production documentation enables you to:

- Support timely publication approval.
- Provide a completed action file for future revisions.
- Make training modifications and revisions in a logical, coordinated, and systematic manner.
- Provide a continuous check on the completeness of the production effort.
- Show the reasons for and actions taken during the production process of the MTP/drill book.

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Chapter 5

Contracting MTPs and Drill Books

5-1. Chapter Overview

Introduction

a. This chapter provides guidance on contracting MTPs and Drill Books. Additionally, this chapter provides information the contracting individual should consider when contracting training products to prevent development of poorly developed products by contractors and cost overruns.

References

b. Refer to TRADOC Reg 350-70, Training Development Management, Processes, and Products, chapter II-7, for all administrative instructions on acquiring contract support for the development of MTPs and Drill Books. Additionally, refer to Technical Managers Handbook for TRADOC Multimedia Contracts. An example of a Statement of Work for MTPs is addressed in Appendix H.

Completing Production

c. This chapter covers the following:

Content	See Paragraph
Information to Know When Contracting Training Products	5-2
Information to Consider When Contracting Training Products	5-3
Guidelines to Consider When Pricing a Contract	5-4
Considerations to Follow During the Contracting Process	5-5
Contracting Mistakes	5-6

5-2. Information to Know When Contracting Training Products

a. When contracting MTP or Drill Books, the contracting individual must have a specific concept of the whole contracting of training product process before proceeding into the contracting phase.

b. Contracting individual must know the following information before proceeding into the contracting phase:

Know the Following Information
What you are contracting and what you are providing the contractor.
How long the contract should take.
What the contract should cost.
What the product will look like when completed.

5-3. Information to Consider When Contracting Training Products

The following information should be considered when tailoring a Statement of Work (SOW) for contracting MTPs or Drill Books.

Information to Consider
Tailor the contract based on your understanding of the contractor's involvement.
Know exactly what is to be contracted.
State what is being provided to the contractor.
State what the contractor is to develop.
State what the deliverables are and their schedules.
Plan the In-Process Reviews (IPRs).
Explain all special considerations that concern the contractor or contracting individual.

5-4. Guidelines to Consider When Pricing a Contract

a. The contracting individual must determine what he believes is the best price for each MTP or Drill Book being developed. Do not accept the contractor's cost factors without contesting them, because they may be inflated.

b. The following guidelines should be considered when pricing a contract.

Guidelines to Consider When Pricing a Contract
Prepare a detailed cost estimate.
Be prepared to defend each cost factor.
Do not pay for items being provided.
Understand the contractor's cost factors.
Identify weak cost factors.
Challenge contractor's cost factors.
Do not agree until you are satisfied.

5-5. Considerations to Follow During the Contracting Process

The following considerations should be continuously followed throughout the contracting process.

Considerations to Follow During Contracting Process
Alterations cost money. Leading cause of cost overruns is believing that the contract can be changed at any time.
Prepare quality control guidelines.
Make sure contractor understands the specific TOE (unit) functions.
Closely scrutinize all deliverables.
Ensure quality work by contractor.
Do not do contractor's work.
Agree on each deliverable at the IPR.
Do not readdress items after the IPR. This will cost more money.
Be the expert throughout the contract process.
Make sure the contractor provides what the contract states.
Always maintain control throughout the contract process

5-6. Contracting Mistakes

The contracting individual should avoid the following contracting mistakes at all times.

Contracting Mistakes
The contractor is your buddy.
Always contract hard projects.
The contractor is the expert.
"I'll know it when I see it."
Give it to the contractor and that's it.
It's not my money.

Appendix A
References

Required Publications

FM 25-1	Training
FM 25-100	Training the Force
FM 25-101	Battle Focused Training
TRADOC Reg 25-30	Preparation, Production and Processing of Armywide Doctrinal and Training Literature (ADTL)
TRADOC Reg 350-70	Training Development Management, Processes, and Products

Related Publications

AR 25-30	The Army Integrated Publishing and Printing Program
AR 25-55	The Department of the Army Freedom of Information Act
AR 310-25	Dictionary of United States Army Terms
AR 310-50	Authorized Abbreviations, Brevity Codes, and Acronyms
DA Pam 310-20	Administrative Publications: Action Officer's Guide
DA Pam 600-67	Effective Writing for Army Leaders
TRADOC Pam 25-34	Desk Guide to Doctrine Writing
TRADOC Pam 350-5	Effective Staff Writing
TC 5-400	Unit Leaders' Handbook for Environmental Stewardship
CALL Handbook No. 92-3	Fratricide Risk Assessment for Company Leadership
CALL Newsletter No. 92-4	Fratricide: Reducing Self-Inflicted Losses
CALL Newsletter No. 93-9	Force Protection (Safety)
USASC Technical Report TR 95-1	Risk Management for Brigade and Battalions.

Parker, Roger C. The Makeover Book. Chapel Hill, North Carolina: Ventana Press, 1989.

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Appendix A
References

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Appendix B
Sample Mission Training Plan

Department Of The Army ARTEP 7-***-10-MTP

MISSION TRAINING PLAN
FOR THE
INFANTRY RIFLE
PLATOON AND SQUAD

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*ARTEP 7-***-10-MTP

ARMY TRAINING AND EVALUATION PROGRAM
7-***-10-MTP

HEADQUARTERS
DEPARTMENT OF THE ARMY
Washington, DC, 30 September 1994

MISSION TRAINING PLAN
FOR THE INFANTRY RIFLE PLATOON AND SQUAD

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*This publication supersedes ARTEP 7-***-10-MTP, 31 March 1987 and 7-***-11-MTP, 6 April 1987.

Appendix B
Sample Mission Training Plan, Continued

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PREFACE

This mission training plan provides the Active and Reserve Component training manager with a descriptive, mission-oriented training program to train the unit to perform its critical wartime operations. While general defense plan missions and deployment assignments impact on the priorities, the operations described here are the principal ones that the infantry platoons are expected to execute with a high level of proficiency. Each unit is expected to train, as a minimum, to the standards of the T&EOs in the MTP. Standards for training may be made more difficult but may not be lowered. This document is in alignment with and is part of the United States Army's training and tactical doctrine.

This MTP applies to the Mechanized Infantry TOE 07-247L000, Motorized Infantry 07-097L000, Infantry 07-077L000, Light Infantry 07-017L000, Airborne 07-015L000, Air Assault 07-037L000, and Ranger platoons and squads 07-057L000/07-087L000.

The proponent of this publication is HQ TRADOC. Submit changes for improving this publication on DA Form 2028 and forward it to Commandant, United States Army Infantry School, ATTN: ATSH-I-V-T-C, Fort Benning, GA 31905-5593.

Unless this publication states otherwise, masculine nouns and pronouns do not refer exclusively to men.

Appendix B
Sample Mission Training Plan, Continued

ARTEP 7-***-10-MTP

CHAPTER 1

UNIT TRAINING

1-1. General. This MTP provides the commander and leaders with guidance on how to train the key missions of the unit. The specific details of the unit's training program will depend on the following factors:

a. Unit's METL.

b. Chain of command training directives and guidance.

c. Training priorities of the unit.

d. Availability of training resources and areas.

1-2. Supporting Material. This MTP describes a critical wartime mission oriented training program which is part of the next higher echelon's training program. This relationship is illustrated in Figure 1-1. The unit's training program consists of:

a. ARTEP 7-***-30-MTP for the infantry company. This ARTEP indicates the relationship of the platoon training program to the company's training program.

b. ARTEP 7-***-10-DRILL for the infantry rifle platoon/squad. Drills must be sustained by the unit. They are US Army standard and may not be modified.

c. Soldier Training Publications (STPs) for the appropriate MOS and skill levels.

d. Officer Foundation Standards (OFS) manual for platoon leaders.

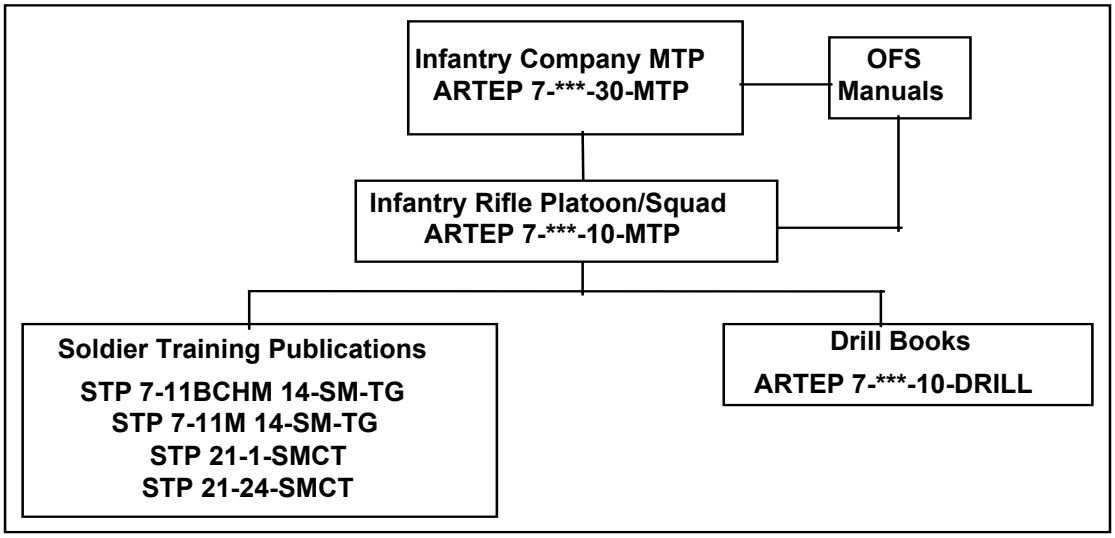

Figure 1-1. MTP echelon relationship.

1-1

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1-3. Contents. This MTP is organized into six chapters:

a. Chapter 1, Unit Training, provides the explanation and organization of this MTP. This chapter explains how to use this MTP in establishing an effective training program.

b. Chapter 2, Training Matrixes, shows the relationship between missions, collective tasks, and individual tasks.

c. Chapter 3, Mission Outlines, presents a graphic portrayal of the relationship between missions and their subordinate tasks.

d. Chapter 4, Training Exercises, consists of an FTX and supporting STXs. They provide training information and a preconstructed scenario. Also, they can serve as a part of an internal or external evaluation. These exercises may be modified to suit the training needs of this unit.

e. Chapter 5, Training and Evaluation Outlines, provides the training and evaluation criteria for all the tasks this unit must master to effectively perform its mission. Each task is a T&EO that identifies tasks steps, performance measures, individual and leader tasks, and OPFOR counter tasks. Each T&EO is part of a mission, and in various combinations, composes training exercises in Chapter 4.

f. Chapter 6, External Evaluation, provides instructions for the planning, preparation, and execution of an external evaluation.

1-4. Missions and tasks.

a. This MTP concerns specified missions found in the TOE and implied missions which this unit must perform in order to accomplish the specified missions. The critical missions are the focus for this unit. The commander may supplement these missions with his own. The following is a listing of the missions for this unit:

(1) Movement to contact.

(2) Attack.

(3) Raid.

(4) Ambush.

(5) Reconnaissance and security.

(6) Defend.

(7) Retrograde.

b. Each of these tasks may be trained individually or jointly with other tasks. Training is based on the criteria described in the T&EOs. Several T&EOs can be trained as an STX. Various combinations of STXs can be used to develop an FTX for the unit to practice its entire mission responsibility. Several STXs can be developed into an external evaluation designed by the next higher echelon to evaluate the unit's ability to perform multiple missions under stress in a realistic environment.

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c. Squad tasks are trained in much the same way as described above. However, the squad leader must also train the drills provided in the drill book.

d. Leader tasks that support the unit's missions are trained through STP and OFS training, battle simulations, and execution of this unit's missions.

e. Individual tasks that support unit tasks are mastered by training to standards in the appropriate STP.

1-5. Principles of training. This MTP is based on the training principles found in FM 25-100, Training the Force. For further information see Chapter 1 of this manual.

1-6. Training strategy. The training program developed and executed by a unit to train to standards in its critical wartime missions is a component of the Army's CATS. The purpose of the CATS is to provide direction and guidance on how the Total Army will train and identify the resources required to support that training. CATS provides the tools that enable the Army to focus and manage training in an integrated manner. Central to the CATS is a series of proponent generated unit and institutional strategies that describe the training and training resources required to train to standard.

a. The unit training strategies central to CATS provide the commander with a descriptive "menu" for training reflecting that while there is an optimal way to train to standard, it is unlikely that all units in the Army will have the exact mix of resources required to execute an optimal training strategy.

b. This unit's training strategy contained in Appendix A of this MTP is a descriptive training strategy that provides a means for training (the battalion) to standard by listing required training events, critical training gates, training event frequencies, and training resources. The commander selects from this MTP those tasks required to train his METL. The training strategies provided in the MTP provide the means whereby those tasks can be trained through a focused and integrated training plan.

c. This unit's training strategy is comprised of three separate training strategies. When integrated with the training tasks found in the MTP, they form a comprehensive and focused training strategy that allows the unit to train to standard. The elements of this unit's training strategy are:

(1) Maneuver and collective training strategy. The maneuver strategy is intended to provide a set of recommended training frequencies for key training events in a unit and depict those resources which are required to support the training events.

(2) Gunnery strategy. The gunnery strategy is built around weapons systems found in the unit and is intended to provide an annual training plan and to depict resources required to support weapons training. Data for the gunnery strategy comes from the Standards in Training Commission (STRAC) manual or appropriate field manual (FM) publications.

(3) Soldier strategy. The soldier strategy provides an annual plan for training and maintaining skills at the individual level and lists the resources required to train a soldier.

d. A critical element in the unit training strategy is the identification of critical training gates. Critical training gates are defined as training events that must be conducted to standard before moving on to a more difficult or resource intensive training event or task. Training gates follow the crawl, walk, run training methodology. For instance, if the unit training strategy calls for conducting a field training exercise (FTX), and a situational training exercise (STX) has been identified as a critical training gate for the FTX, the training tasks contained in the STX must be trained to standard prior to conducting

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the FTX. Standards for all tasks must be clearly defined so that the trainer can assess the preparedness of his soldiers, or unit(s), to move on to more complex training events. The provision for critical training gates recognizes that the unit's METL, and the commander's assessment of his unit's training status will determine the selection and timing of the collective training exercises in a specific unit's training strategy.

e. When developing the unit's training plan, the commander will identify the training tasks from the MTP required to train his METL. CATS is found in Appendix A of company and higher echelon MTPs.

1-7. Conducting training. This MTP is designed to facilitate the planning, preparation, and conduct of unit training as explained in the FM 25-100, Training the Force, and FM 25-101, Battle Focused Training.

a. The commander will assign the missions and tasks for training based on his METL and the training guidance from the next higher headquarters. Trainers must plan and execute training in support of this guidance.

b. The commander will review the mission outlines in Chapter 3 to determine whether the FTXs and STXs provided will support or can be modified to support your commander's guidance. If they do not support the guidance or need to be modified, refer to the matrixes in Chapter 2. These matrixes provide a listing of all collective tasks, drills, and individual tasks which must be mastered to perform the mission.

c. The commander will prioritize the tasks that need training. You will never have time to train everything. You must orient on the greatest challenges and most difficult sustainment skills.

d. The commander will integrate training tasks into the training schedule. Use the following procedures to do this:

(1) List the tasks in the priority and frequency they need to be trained.

(2) Determine the amount of time required and how you can use multi-echelon training for the best results.

(3) Determine where the training can take place.

(4) Determine who will be responsible for what. The leader of the element being trained must always be involved.

(5) Organize your needs into blocks of time and training vehicles.

e. The commander must approve the list of tasks to be trained and schedule them on the unit training schedule.

f. The commander must determine the equipment and supplies needed to conduct the training.

g. The commander must keep subordinate leaders informed and oversee their training. The standards must be rigidly enforced.

1-8. Force protection (safety).

a. Safety is a component of force protection. Commanders, leaders and soldiers use risk assessment and management to tie force protection into the military around the mission. Risk management assigns responsibility, institutionalizes commander's review of operational safety and leads to decision making at a level of command appropriate to the risk. The objective of safety is to help units' protect combat power through accident prevention which enables units to win fast and

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decisively, with minimum losses. Safety is an integral part of all combat operations. Safety begins with readiness which determines a unit's ability to perform its METL to standard. Readiness standards addressed during METL assessment are:

(1) Soldiers with the self-discipline to consistently perform tasks to standard.

(2) Leaders who are ready, willing, and able to enforce standards.

(3) Training that provides skills needed for performance to standard.

(4) Standards and procedures for task preference that are clear and practical.

(5) Support for task preference, including equipment, personnel, maintenance, facilities and services.

b. Risk management is a tool that addresses the root causes (readiness shortcomings) of accidents. It assists commanders and leaders in not only identifying what the next accident is going to be, but it also helps identify who will have the next accident. Risk management is a way to put more realism into training without paying the price in deaths, injuries, or damaged equipment.

c. Safety demands total chain of command involvement in planning, preparing, executing and evaluating training. The chain of command responsibilities include:

(1) Commanders.

(a) Seek optimum, not adequate, performance.
(b) Specify the risk they will accept to accomplish the mission.
(c) Select risk reductions provided by staff.
(d) Accept or reject residual risk, based on the benefit to be derived.
(e) Train and motivate leaders at all levels to effectively use risk management concepts.

(2) Staff.

(a) Assists the commander in assessing risks and develop risk reduction options for training.
(b) Integrates risk controls in plans, orders, METL standards and performance measures.
(c) Eliminates unnecessary safety restrictions that diminish training effectiveness.
(d) Assesses safety performance during training.
(e) Evaluates safety performance during AARs.

(3) Subordinate Leaders.

(a) Apply consistently effective risk management concepts and methods to operations they lead.
(b) Report risk issues beyond their control or authority to their superiors.

(4) Individual Soldiers.

(a) Reports unsafe conditions and acts and corrects the situation when possible.
(b) Establishes a buddy system to keep a safety watch on one another.
(c) Takes responsibility for personal safety.

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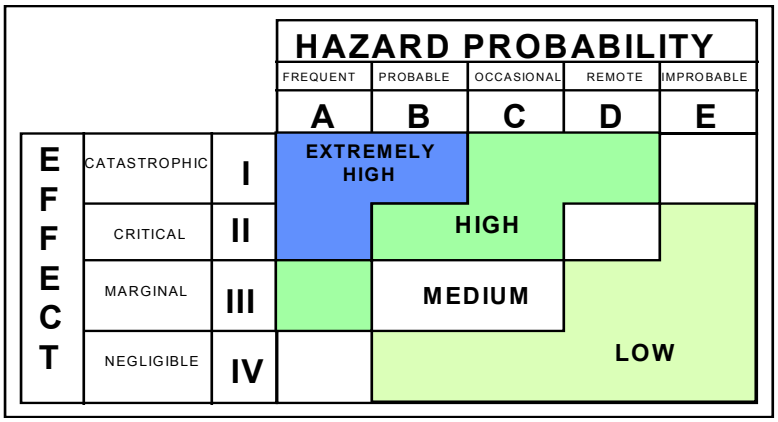
(d) Works as a team member.
(e) Modifies own risk behavior.

d. Risk management is a five step cyclic process that is easily integrated into the decision making process outlined in FM 101-5. The five steps are:

(1) Identify hazards. Identify the most probable hazards for the missions.

(2) Assess hazards. Analyze each hazard to determine the probability of its causing an accident and the probable effect of the accident. Identify control options to eliminate or reduce the hazard. The Army Standard Risk Assessment Matrix (Figure 1-2), is a tool for assessing hazards.



Effect
Catastrophic Death or permanent total disability, system loss, major property damage.
Critical Permanent partial disability, temporary total disability in excess of 3 months, major system damage, significant property damage
Marginal Minor injury, lost workday accident, compensable injury or illness, minor system damage, minor property damage
Negligible First aid or minor supportive medical treatment, minor system impairment

Probability
Frequent Individual soldier/item.....Occurs often in career/equipment service life.
All soldiers exposed or item inventory.....Continuously experienced.
Probable Individual soldier/item.....Occurs several times in career/equipment service life.
All soldiers exposed or item inventory.....Occurs frequently.
Occasional Individual soldier/item.....Occurs sometime in career/equipment service life.
All soldiers exposed or item inventory.....Occurs sporadically, or several times in inventory service life..
Remote Individual soldier/item.....Possible to occur in career/equipment service life.
All soldiers exposed or item inventory.....Remote chance of occurrence; expected to occur sometime in inventory service life.
Improbable Individual soldier/item.....Can assume will not occur in career/equipment service life.
All soldiers exposed or item inventory.....Possible, but improbable; occurs only very rarely.

Risk Levels
Extremely High Loss of ability to accomplish mission.
High Significantly degrades mission capabilities in terms of required mission standards.
Medium Degrades mission capabilities in terms of required mission.
Low. Little or no impact on mission accomplishment.

Figure 1-2. Risk Assessment Matrix.

(3) Make risk decisions. Weigh the risk against the benefits of performing the operations. Accept no unnecessary risks and make any residual risk decisions at the proper level of command.

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(4) Implement controls. Integrate specific controls into OPLANs, OPORDs, SOPs and rehearsals. Communicate controls to the individual soldier.

(5) Supervise. Determine the effectiveness of controls in reducing the probability and effect of identified hazards to include follow up and after action review. Develop the lessons learned.

e. Fratricide is a component of force protection and is closely related to safety. Fratricide is the employment of weapons, with the intent to kill the enemy or destroy his equipment, that results in unforeseen and unintentional death, injury or damage to friendly personnel or equipment. Fratricide is by definition an accident. Risk assessment and management is the mechanism with which incidence of fratricide can be controlled.

f. The primary causes of fratricide are:

(1) Direct fire control plan failures. These occur when units fail to develop defensive and, particularly, offensive fire control plans.

(2) Land navigation failures. These result when units stray out of sector, report wrong locations, and become disoriented.

(3) Combat identification failures. These failures include gunners or pilots being unable to distinguish thermal and optical signatures near the maximum range of their sighting systems and units in proximity mistaking each other for the enemy under limited visibility conditions.

(4) Inadequate control measures. Units fail to disseminate the minimum maneuver and fire support control measures necessary to tie control measures to recognizable terrain or events.

(5) Reporting communication failures. Units at all levels face problems in generating timely, accurate, and complete reports as locations and tactical situations change.

(6) Weapons error. Lapses in individual discipline lead to charge errors, accidental discharges, mistakes with explosives and hand grenades, and similar incidents.

(7) Battlefield hazards. Unexploded ordnance, unmarked or unrecorded minefields, FASCAM, and booby traps litter the battlefield. Failure to mark, remove, record or anticipate these hazards increases the risk of friendly casualties.

g. Fratricide results in unacceptable losses and increases the risk of mission failure. Fratricide undermines the unit's ability to survive and function. Units experiencing fratricide observe these consequences:

(1) Loss of confidence in the unit leadership.

(2) Increasing self-doubt among leaders.

(3) Hesitation to use supporting combat systems.

(4) Over supervision of units.

(5) Hesitation to conduct night operations.

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(6) Loss of aggressiveness during fire and maneuver.

(7) Loss of initiative.

(8) Disrupted operations.

(9) General degradation of cohesiveness, morale, and combat power.

1-9. Environmental protection. Protection of natural resources has continued to become an ever increasing concern to the Army. It is the responsibility of all unit leaders to decrease, and if possible, eliminate, damage to the environment when conducting training. Environmental risk management parallels safety risk management, and is based on the same philosophy as safety risk management. Environmental risk management consists of the following steps:

a. Identify hazards. Identify potential sources for environmental degradation during analysis of METT-T factors. This requires identification of environmental hazards. An environmental hazard is a condition with the potential for polluting air, soil, or water and or destroying cultural and historical artifacts.

b. Assess the hazard. Analyze potential severity of environmental degradation using environmental risk assessment matrixes (Figure 1-3). Severity of environmental degradation is considered when determining the potential effect an operation will have on the environment. The risk impact value is defined as an indicator of the severity of environmental degradation. Quantify the risk to the environment resulting from the operation as extremely high, medium, or low, using the environmental risk assessment matrixes.

c. Make environmental risk decisions. Make decisions and develop measures to reduce high environmental risks.

d. Brief chain of command. Brief chain of command (to include installation environmental office, if applicable), on proposed plans and pertinent high-risk environmental matrixes. Risk decisions are made at a level of command that corresponds to the degree of risk.

e. Implement controls. Implement environmental protection measures by integrating them into plans, orders, SOPs, training performance standards, and rehearsals.

f. Supervise. Supervise and enforce environmental protection standards.

1-10. Evaluation. The T&EOs in Chapter 5 describe standards that must be met for each task.

a. Evaluations can be internal or external. Internal evaluations are conducted at all levels, and they must be inherent in all training. External evaluations are usually more formal and are normally conducted by a headquarters two levels above the unit being evaluated. (See Chapter 6, External Evaluation.)

b. A critical weakness in training is the failure to evaluate each task every time it is executed. The ARTEP concept is based on simultaneous training and evaluation. Too often, leaders do not practice continuous evaluation. Often, soldiers or small units are trained to perform a task to standard; then later, when they execute that task as part of a training exercise, they execute it poorly or incorrectly, and are not corrected. For this program to work, trainers and leaders must continually evaluate training as it is being executed.

Environmental area	Rating:					
Unit Operations	**Risk Impact**					
Movement of heavy vehicle/systems	5	4	3	2	1	0
Movement of personnel and light vehicles/systems	5	4	3	2	1	0
Assembly area activities	5	4	3	2	1	0
Field maintenance of equipment	5	4	3	2	1	0
Garrison maintenance of equipment	5	4	3	2	1	0

Environmental Risk Assessment Worksheet

	Movement of heavy vehicles/systems	Movement of personnel and light systems	Assembly area activities	Field maintenance of equipment	Garrison maintenance of equipment	Risk rating
Air pollution						
Archeological and historical sites						
Hazardous materiel/waste						
Noise pollution						
Threatened/endangered species						
Water pollution						
Wetland protection						
Overall rating						

Overall Environmental Risk Assessment Form

Category	Range	Environmental Damage	Decision Maker
Low	0-58	Little or none	Appropriate level
Medium	59-117	Minor	Appropriate level
High	118-149	Significant	Division Cmdr
Extremely High	150-175	Severe	MACOM Cmdr

Risk Categories

Figure 1-3. Environmental Risk Assessment Matrix.

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c. Leaders should emphasize direct, on-the-spot evaluations. Correcting poor performance during individual or small group training is easy to do. In higher level exercises, it is usually not feasible to do this with outside evaluators, but should not be totally eliminated. Plan AARs at frequent logical intervals during the exercises (usually after the completion of a major subordinate task). This is a proven technique which will allow you to correct performance shortcomings while they are still fresh in everyone's mind and prevents reinforcement of bad habits.

d. FM 25-101 provides detailed instructions for conducting an AAR and detailed guidance on coaching and critiquing during training.

11-11. Feedback. Recommendations for improvement of this MTP are requested. Feedback will help to ensure that this MTP answers the training needs of units in the field. There is a questionnaire at the end of this MTP to make it easier to send recommendations and comments.

Appendix B
Sample Mission Training Plan

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CHAPTER 2

TRAINING MATRIXES

2-1. General. The training matrix assists the commander in planning the training of his unit's personnel. The mission identification table listed below (Figure 2-1) provides mission identification for the unit.

Mission Identification Table **Mission Title**
Movement to Contact
Attack
Raid
Ambush
Reconnaissance and Security
Defend
Retrograde

Figure 2-1. Mission Identification Table.

2-2. Mission-to-Collective Tasks Matrix. This matrix (Figure 2-2), identifies the mission and their supporting collective tasks. The tasks are listed under the appropriate BOS which are indicated by an asterisk in the matrix. The BOS used in this matrix are defined in TRADOC Pam 11-9. A specific mission is trained by identifying collective tasks in the vertical column for the mission. Based on the proficiency of the unit, training is focused on operational weaknesses.

	Mission						
Collective Tasks and T&EO Number	Movement to Contact	Attack	Raid	Ambush	Recon and Security	Defend	Retrograde
Maneuver*							
Assault 7-3-1001	X	X	X			X	X
Overwatch/Support by Fire 7-3-1007	X	X	X			X	X
Disengage 7-3-1008	X	X	X	X		X	X
Knock Out Bunker 7-3-1012	X	X	X				
Clear Trench Line 7-3-1015	X	X	X				
Perform Raid 7-4-1015			X				
Fire Support*							
Employ Fire Support 7-3-1006	X	X	X	X	X	X	

Figure 2-2. Mission-to-Collective Tasks Matrix. (NOTE: Entire matrix not shown)

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2-3. Publication Reference-to-Collective Task Matrix. This matrix (Figure 2-3), identifies the reference that contains detailed information about the collective tasks.

	Publications							
Collective Tasks and T&EO Number	FM 3-4	FM 3-100	FM 7-7	FM 7-7J	FM 7-8	FM 7-70	FM 90-4	FM 90-8
Assault 7-3-1001			X	X	X	X		
Overwatch/Support by Fire 7-4-1007			X	X	X	X		
Knock Out Bunker 7-3-1012					X	X		
Clear Trench Line 7-3-1015					X			
Perform Raid 7-3-1016			X	X	X	X		
Perform Anti-Armor Ambush 7-3-1019			X	X	X	X		
Perform Hasty Ambush 7-3-1018			X	X	X	X		X
Perform Point Ambush 7-3-1020			X	X	X	X		X
Defend 7-3-1021			X	X	X	X		
Occupy Assembly Area 7-3-1022			X	X	X	X		
Move Tactically 7-3-1025			X	X	X	X		
Cross Danger Area 7-3-1028			X	X	X	X		
Perform Tactical Road March 7-3-1035			X	X	X	X		
Perform Passage of Lines 7-3-1040			X	X	X	X		
Employ Fire Support 7-3-1006			X	X	X	X		
Prepare for Chemical Attack 7-3-1050			X	X	X	X		
Prepare for Nuclear Attack 7-3-1051			X	X	X	X		
Cross Chemically Contaminated Area 7-3-1052			X	X	X	X		
Cross Nuclear Contaminated Area 7-3-1077			X	X	X	X		

Figure 2-3. Publication Reference-to-Collective Task Matrix. (NOTE: Entire matrix not shown.)

2-2

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2-4. Individual-to-Collective Task Matrix. This matrix (figure 2-4), links the collective tasks to the common tasks, skill levels 1 through 4; MOSs 11B and 11M tasks, skill levels 1 through 4; and OFS II tasks. Blank boxes indicate skills normally not needed for a particular T&EO.

	Individual Task Number and Title Common Task Skill Level I			
Collective Task and T&EO Number	031-503-1005 Maintain Your M17-Series Protective Mask With Hood	031-503-1004 Protect Yourself From CB Injury/ Contamination Using Your M17-Series Protective Mask With Hood	031-503-1007 Decontaminate Your Skin and Personal Equipment Using An M258A1 Decontamination Kit	031-503-1006 Protect Yourself From NBC Injury/ Contamination When Drinking From Your Canteen While Wearing Your Protective Mask
Perform Hasty Ambush 7-3-1018				
Perform Point Ambush 7-3-1020				
Defend 7-3-1021				
Occupy Assembly Area 7-3-1022				
Move Tactically 7-3-1025				
Cross Danger Area 7-3-1028				
Perform Tactical Road March 7-3-1035				
Perform Passage of Lines 7-3-1040				
Employ Fire Support 7-3-1006				
Prepare for Chemical Attack 7-3-1050	X	X	X	X
Prepare for Nuclear Attack 7-3-1051	X	X		X
Cross Chemically Contaminated Area 7-3-1052	X	X	X	X
Cross Nuclear Contaminated Area 7-3-1077	X	X		

Figure 2-4. Individual-to-Collective Task Matrix.
(NOTE: Entire matrix not shown.)

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2-5. Battle Drill-to-Collective Task Matrix. This matrix (Figure 2-5), illustrates the battle drills that support the collective tasks in this MTP. The letter "X" in a row indicates a battle drill that would normally be done to accomplish the overall T&EO. Blank boxes indicate skills normally not needed for a particular T&EO.

	Title and Drill Number				
Collective Task and T&EO Number	React to Contact 7-3-D001	Break Contact 7-3-D002	React to Ambush 7-3-D003	React to Indirect Fire 7-3-D004	React to Chemical Attack 7-3-D005
Assault 7-3-1001		X			
Overwatch/Support by Fire 7-4-1007				X	
Knock Out Bunker 7-3-1012		X			
Clear Trench Line 7-3-1015					
Perform Raid 7-3-1016	X	X	X		
Perform Anti-Armor Ambush 7-3-1019		X			
Perform Hasty Ambush 7-3-1018		X			
Perform Point Ambush 7-3-1020		X			
Defend 7-3-1021	X				X
Occupy Assembly Area 7-3-1022	X				
Move Tactically 7-3-1025	X	X	X	X	
Cross Danger Area 7-3-1028	X				
Perform Tactical Road March 7-3-1035	X			X	
Perform Passage of Lines 7-3-1040	X				
Employ Fire Support 7-3-1006					
Prepare for Chemical Attack 7-3-1050					X

Figure 2-5. Battle Drill-to-Collective Task Matrix.
(NOTE: Entire matrix not shown.)

Appendix B
Sample Mission Training Plan, Continued

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CHAPTER 3

MISSION OUTLINES

3-1. General. The mission outline illustrates the relationship between the missions and their supporting tasks. Each outline provides the trainer a diagram of the unit mission, example FTXs and STXs, and the collective tasks that comprise them.

3-2. Mission Outlines. Since unit training is mission oriented, the mission outline shows how tasks training contributes to the ability of the unit to perform its missions. The mission outlines, Figure 3-1, provide the commander with a visual outline of his unit's missions in a format that facilitates the planning and management of training.

INFANTRY PLATOON
MISSION OUTLINE
ATTACK

STX Occupy Assembly Area 7-3-E0003	STX Passage of Lines (Forward) 7-3-E0004	STX Assault Known Position 7-3-E0004
Occupy Assembly Area 7-3-1022	Prepare for Combat 7-3-1046	Perform Actions at Danger Area 7-3-0010
Prepare for Combat 7-3-1046	Perform Passage of Lines 7-3-1040	Employ Fire Support 7-3-1006
Move Tactically 7-3-1025	Move Tactically 7-3-1025	Execute Assault 7-3-1022
React to Contact 7-3-1013 7-3-D001	React to Ambush 7-3-1014 7-3-D003	Enter/Clear a Trench 7-3-D007
Consolidate and Reorganize 7-3-1047	Break Contact 7-3-1002	

Figure 3-1. Attack Mission Outline.
(NOTE: Outlines for all missions not shown.)

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CHAPTER 4

TRAINING EXERCISES

4-1. General. Training exercises are used to train and practice the performance of collective tasks. This MTP contains a sample Situational Training Exercise (STX). It is designed to assist you in developing, sustaining, and evaluating your unit's mission proficiency. Table 4-1 lists the STX by title, exercise number, and page number.

Title	Exercise Number	Page
Attack	7-3-E0001	4-1

Table 4-1. List of STXs.

4-2. Situational Training Exercise. STXs are short, scenario-driven, mission-oriented tactical exercises that train a group of closely related collective tasks. The STX provides the information for training the missions that make up the critical wartime mission. The STX does the following important functions:

a. It provides repetitive training on the missions.

b. It allows training to focus on identified weaknesses.

c. It allows the unit to practice the STX before conducting a higher echelon FTX.

d. It saves time by providing a majority of the information needed to develop a vehicle for training.

INFANTRY PLATOON
STX
7-3-E0001
ATTACK

1. Objective. This example STX trains collective, leader, and individual tasks in the platoon's operation, Attack.

2. Interface. This STX supports the Company FTX 7-2-E0002, Deliberate Attack. This STX is supported by Battle Drill 7-3-D001, React To Contact.

3. Training.

a. Guidance. The trainer should review the individual, leader, and collective tasks that are performed during the STX. Determine which tasks may require initial or refresher training.

(1) Individual training. Individual training should be on the soldier's manual tasks required to support this STX. The Individual-to-Collective Task Matrix in Chapter 2 should be used as a source for these individual tasks. Individual training is based on the tasks, conditions, and standards in the 11B, 11M, and the soldier's common tasks manuals. Training should be hands-on and performance-oriented. During training, leaders assess soldier proficiency by evaluating task performance against the soldier's manual standards, and provide feedback to the soldiers. The individual training and evaluation program includes things such as common tasks test and commander's evaluations.

Appendix B
Sample Mission Training Plan, Continued

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(2) Collective training. Collective training should be on the collective tasks required for the STX. Battle drills and STXs are key tools for squad and platoon collective training. As with individual tasks, drills should be trained to standard with feedback provided, as required. Collective tasks that could support this STX and mission, as well as other missions, are in the Mission-to-Collective Task Matrix in Chapter 2 and the attack operation outline in Chapter 3.

(3) Leader training. Leader training should be on the leader tasks required for the exercise as well as the individual tasks. Leader tasks are trained in the same manner as stated in paragraph 3a or by one or all of the following methods. When materials and facilities are not available, innovation is the answer. Do not limit training to the methods listed.

(a) Classroom discussion on how to plan the exercise and how to implement unit SOPs. (See FM 25-4, Chapter 2.)

(b) Map reconnaissance that assists in terrain analysis and war-gaming. (Use a map of the area where the STX is to be conducted.)

(c) Terrain board or sand table exercises that permit simulations or miniatures to be used to gain three-dimensional perspectives in war-gaming and or rehearsing the exercise. (Model the terrain board or sand table to match the terrain where the exercise will be conducted.)

(d) Tactical exercises without troops allow leaders to train on the ground, practicing land navigation movement, reporting, and other leader actions. (FM 25-4, pages 40 through 44.)

(e) Simulations and games teach leaders as part of a continuing officer and noncommissioned officer development program.

(f) Training extension courses present information and demonstrate how tasks are performed to standard using audiovisual equipment. (DA Pam 350-100.)

b. Training Tips. Tips for training and general instructions on how to prepare for and accomplish the STX are:

(1) Know the requirements for infiltration (FM 7-70, paragraph 3-5) tactical movement (FM 7-70, paragraph 3-2), and consolidation and reorganization (FM 7-70, paragraphs 5-10 and 8-14).

(2) Conduct a leader's reconnaissance of the training area with squad leaders to ensure that you do not make time-consuming mistakes.

(3) Review the standards for the T&EOs that support this exercise.

(4) This STX may be conducted using several options.

(a) The exercise may be conducted with ammunition, without ammunition, or live fire. The use of ammunition is encouraged to add more realism to the exercise.

(b) The exercise may be conducted with or without MILES. MILES provides better feedback and should be used, if available.

(c) The exercise can be conducted under all environmental conditions, both day and night, with or without NBC. This scenario involves an active NBC environment.

(5) Instructions for this STX are as follows:

(a) This STX should be initially trained and rehearsed slowly, on open terrain, during good visibility, and with frequent explanations and critiques by leaders. This simple execution, combined with a thorough prebrief and "chalk talks" constitutes the "crawl" stage of STX training. The "walk" phase of this STX entails conducting the training at closer to normal rates, on more difficult terrain, and with stops for explanation and critique only when problems occur (except for planned AARs). The STX is executed under conditions as close to those expected in combat as possible for the "run" phase. Full operational security and camouflage, realistic time frames and distances, challenging terrain, and aggressive OPFOR, NBC environment, and movement distances. This exercise is conducted at full speed after conducting building-block training (individual training, drills) to reach the run level of execution.

(b) The T&EO standards for this exercise are in Chapter 5. These standards must be met to obtain the maximum benefits from the training.

(c) This exercise should be conducted on a recurring basis to sustain proficiency; however, since many of the T&EOs in this STX will be trained in other STXs, practice may occur through integration rather than retraining the STX.

(d) Ideally, the OPFOR replicates enemy forces in size and strength to realistically portray threat activities. (See Chapter 6.)

(e) At least one evaluator should be assigned to control OPFOR activities. The evaluator evaluates OPFOR actions, ensures realism, stresses safety, and assesses loss and damage. If the OPFOR is in groups for several simultaneous actions, additional OPFOR evaluators or controllers are necessary. (See Chapter 6.)

(f) OPFOR units should look and fight like potential enemy. This assists soldiers in understanding threat tactics, doctrine, and weapon systems. (See Chapter 6.)

c. Training Enhancers. This STX requires the platoon to perform passage of lines, move tactically, overwatch and support by fire, knock out a bunker, and consolidate and reorganize.

(1) When basic proficiency is attained for the tasks in this STX, the STX may be conducted under limited visibility conditions, both with and without NVDs.

(2) This STX can be conducted under increasing MOPP levels as proficiency increases.

4. General Situation.

a. Contact with the enemy has been reestablished. Initial reports indicate that he is at 65 to 70 percent strength and has not been reinforced. His defensive positions are not well established. He has the capability for indirect fire and CAS. The enemy has used chemicals and will probably do so again. An attack is ordered to prevent reinforcement and establishment of heavily fortified defense in depth. The platoon is acting as part of a larger force and has indirect fire available. Figure 4-1 illustrates the graphic scenario of task performance in this exercise.

b. This exercise begins with the receipt of a company FRAGO by the platoon and ends after consolidation and reorganization. An AAR should be held after completing the support by fire task and after consolidation and reorganization. A final AAR should be conducted once all evaluation notes are compiled. If necessary, run portions of the exercise again until you are satisfied with your platoon's performance. Table 4-2 provides a recommended sequence of T&EOs and time for each portion of the STX.

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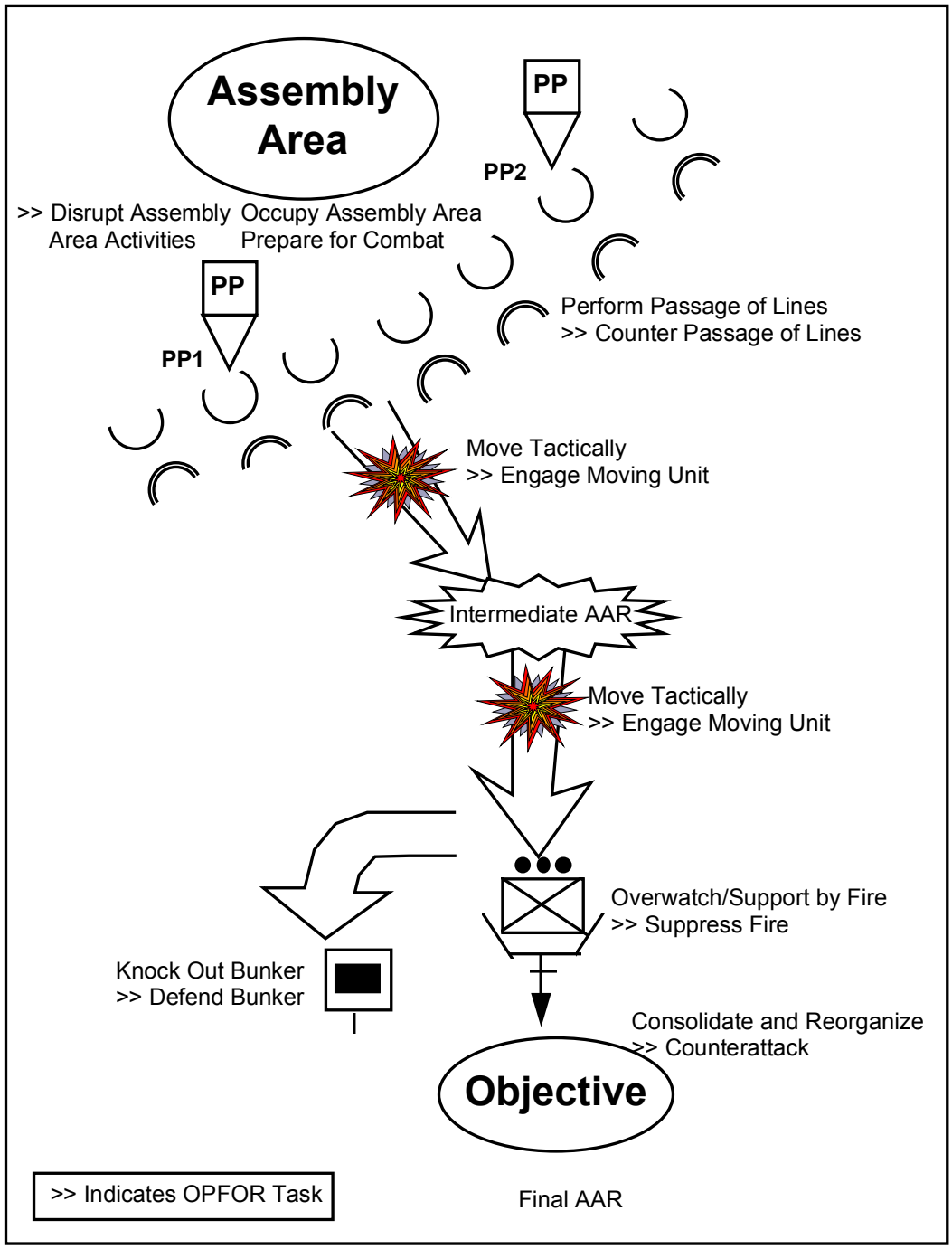

Figure 4-1. Graphic scenario of task performance for STX 7-3-E0001.

ARTEP 7-***-10-MTP

Sequence	Event	Estimated Time
1	Occupy Assembly Area	1.0 hr.
2	Prepare for Combat	2.0 hrs.
3	Perform Passage of Lines	30 min.
4	Move Tactically	1.0 hr.
5	React to Contact	5 min.
6	Intermediate AAR	20 min.
7	Move Tactically	1.0 hr.
8	Overwatch/Support by Fire	2.0 hrs.
9	Knock Out Bunker	2.0 hrs.
10	Consolidate and Reorganize	1.0 hr.
11	Final AAR	45 min.
12	Maintain Operation Security	
		Total Time 11 hrs.

1. These tasks are integrated and evaluated throughout the exercise.

2. Events will be trained to standards, not time limitations. The time required to train an event will vary based on METT-T factors and the training proficiency of the unit.

3. Additional time required if great portions of the exercise are conducted at night or during other limited visibility.

Table 4-2. Sequence of events and time for STX 7-3-E0001.

5. Special Situation.

a. Your platoon is part of a company in a secure assembly area where the platoon receives the following FRAGO to attack (Figure 4-2).

b. The company commander has ordered your platoon to lift your supporting fires. A sister platoon is consolidating on the objective when it receives fire from a bunker. The company commander orders your platoon to knock out the bunker.

6. Support Requirements.

a. Minimum trainers/observer controllers: This exercise can be conducted by the company commander or platoon leader who will be the trainer and primary evaluator. At least one other observer controller is required with the OPFOR. Another platoon being trained or evaluated should be used as the platoon making the main attack on the supply site. This platoon will need an additional trainer or observer controller.

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FRAGMENTARY ORDER

1. SITUATION.

a. Enemy Forces. The enemy forces are at 60 to 70 percent strength. They are preparing to counterattack and expected to use air-delivered or artillery-delivered nonpersistent nerve agent.

b. Friendly Forces. (Battalion designation) Infantry attacks (date/time group) to destroy enemy forces at Objective _____ to disrupt the enemy counterattack.

2. MISSION. (_____) Company destroys enemy force at Objective DELTA (grid) NLT (date/time) to prevent the enemy from establishing a heavily fortified defense.

3. EXECUTION.

a. Concept of the Operation. (See Overlay.)

(1) Intent. Destroy enemy supply and transport that will support his planned counterattack.

(2) Fire support. Priority of fire to (another) Platoon.

b. (Another) Platoon.

(1) Main attack to seize Objective_____(grid) and destroy enemy supply trains.

(2) Perform passage of lines using Passage Point 2.

c. (Evaluated) Platoon.

(1) Overwatch/support by fire (another) Platoon's attack on Objective ____.

(2) Perform passage of lines using Passage Point 1.

(3) Be prepared to assume the main attack, on order.

d. (Another) Platoon.

(1) Defeat enemy units in your zone of action to prevent reinforcement of or escape from Objective DELTA.

(2) Perform passage of lines using Passage Point 2.

e. Coordinating Instructions.

(1) Company RP is (grid).

(2) Company linkup point is (grid).

Figure 4-2. Example FRAGO for STX 7-3-E0001.

b. Vehicles/communications: Those organic to the platoon. Two or three vehicles or trailers should be in the OPFOR supply site.

c. Opposing force. The OPFOR ground force should at least be a reinforced squad.

d. Maneuver area. A training area with at least 15 by 4 kilometers for infiltration, cross-country movement, and several locations for supply sites with a bunker is desired. The terrain should offer multiple, covered and concealed approaches to the objective area. Using terrain that limits the leader to a "geographical" or "school solution" does not allow evaluation of the unit's ability to conduct a terrain analysis and select covered and concealed positions.

e. Consolidated support requirements: This exercise requires the items listed in Table 4-2.

AMMUNITION	QUANTITY
5.56mm	40 rounds each rifle
7.62mm	150 rounds each M60
5.56mm	200 rounds each SAW
ATWESS cartridge	4 Viper/LAW, 3 each Dragon
Hand grenade, body M69	2 each rifleman
Hand grenade, fuse (practice)	2 each rifleman
Simulator, projectile, ground burst	20 each exercise
Simulator, hand grenade	20 each exercise

OTHER ITEMS	QUANTITY
Batteries, BA 200 (6-volt)	12 each
Batteries, BA 3090 (9-volt)	140 each

MILES Equipment	Platoon	Evaluators	OPFOR
M16 system	32		15
M60 system	3		1
Controller Guns		2	
Small arms alignment fixture		1	

Table 4-3. Consolidated support requirements for STX 7-3-E0001.

f. Commanders should consult local regulations and range control requirements during coordination to ensure compliance with restrictions such as constraints on pyrotechnics.

7. T&EO Sequence. Table 4-3 lists the T&EOs from Chapter 5 used to evaluate the STX.

TASK	NUMBER	PAGE
Occupy Assembly Area	7-3-1022	5-46
Prepare for Combat	7-3-1046	5-158
Perform Passage of Lines	7-3-1040	5-61
Move Tactically	7-3-1025	5-49
Overwatch/Support by Fire	7-3-1007	5-9

Table 4-4. T&EOs used to evaluate STX 7-3-E0001.

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TASK	NUMBER	PAGE
Knock Out Bunker	7-3-1012	5-17
Consolidate and Reorganize	7-3-1047	5-167
Maintain Operation Security	7-3-1057	5-141

Table 4-4. T&EOs used to evaluate STX 7-3-E0001, Continued.

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CHAPTER 5

TRAINING AND EVALUATION OUTLINES

5-1. General. This chapter contains the training and evaluation outlines for the unit. T&EOs are the foundation of the MTP and the collective training of the units. T&EOs are training objectives (task, conditions, and standards) for the collective tasks which support critical wartime operations. The unit must master designated collective tasks to perform its critical wartime operations. T&EOs may be trained separately, in an STX, in an FTX, or in live-fire exercises. For collective live-fire standards, the trainer needs to refer to the applicable gunnery manual for the appropriate course of fire. Those standards and courses of fire need to be integrated into the training exercise.

5-2. Structure. The T&EOs in this chapter are listed in Table 5-1. The Mission-to-Collective Task Matrix in Chapter 2 lists the T&EOs required to train the critical wartime missions according to their specific BOS.

5-3. Format. The T&EOs are prepared for every collective task that supports critical wartime operation accomplishment. Each T&EO contains the following items:

a. Element. This identifies the unit or unit element(s) that performs the task.

b. Task. This is a description of the action to be performed by the unit, and provides the task number.

c. References. These are in parenthesis following the task number. The reference which contains the most information (primary reference) about the task is listed first and underlined. If there is only one reference do not underline the reference.

d. Iteration. Used to identify how many times the task is performed and evaluated during training. The "M" identifies when the task is performed in MOPP4.

e. Commander/Leader Assessment. This is used by the unit leadership to assess the proficiency of the unit in performing the task to standard. Assessments are subjective in nature and use all available evaluation data and subunit leader input to develop an assessment of the organization's overall capability to accomplish the task. Use the following ratings:

(1) T - Trained. The unit is trained and has demonstrated its proficiency in accomplishing the task to wartime standards.

(2) P - Needs practice. The unit needs to practice the task. Performance has demonstrated that the unit does not achieve standard without some difficulty or has failed to perform some task steps to standard.

(3) U - Untrained. The unit can not demonstrate an ability to achieve wartime proficiency.

f. Condition. A statement of the situation or environment in which the unit is to do the collective task.

g. Task standard.

(1) The task standard states the performance criteria that a unit must achieve to successfully execute the task. This overall standard should be the focus of training. It should be understood by every soldier.

5-1

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(2) The trainer or evaluator determines the unit's training status using performance observation measurements (where applicable) and his judgment. The unit must be evaluated in the context of the METT-T conditions. These conditions should be as similar as possible for all evaluated elements. This will establish a common base line for unit performance.

h. Task Steps and Performance Measures. This is a listing of actions that is required to complete the task. These actions are stated in terms of observable performance for evaluating training proficiency. The task steps are arranged sequentially along with supporting individual tasks and their reference. Leader tasks within each T&EO are indicated by an asterisk (*). Under each task step are listed the performance measures that must be accomplished to correctly perform the task step. If the unit fails to correctly perform one of these task steps to standard, it has failed to achieve the overall task standard.

i. GO/NO-GO column. This column is provided for annotating the platoon's performance of the task steps. Evaluate each performance measure for a task step and place an "X" in the appropriate column. A major portion of the performance measures must be marked a "GO" for the task step to be successfully performed.

j. Task performance/evaluation summary block. This block provides the trainer a means of recording the total number of task steps and performance measures evaluated and those evaluated as "GO." It also provides the evaluator a means to rate the units demonstrated performance as a "GO" or "NO-GO." It also provides the leader with a historical record for five training iterations.

k. Supporting Individual Tasks. This is a listing of all supporting individual tasks required to correctly perform the task. Listed are the reference, tasks number, and task title.

l. OPFOR Tasks. These standards specify overall OPFOR performance for each collective task. These standards ensure that OPFOR soldiers accomplish meaningful training and force the training unit to perform its task to standard or "lose" to the OPFOR. The OPFOR standards specify what must be accomplished--not how it must be accomplished. The OPFOR must always attain its task standards, using tactics consistent with the type of enemy they are portraying.

5-4. Usage. The T&EOs can be used to train or evaluate a single task. Several T&EOs can be used to train or evaluate a group of tasks such as an STX or FTX.

5-5. Table of Training and Evaluation Outlines.

BOS AND TASK TITLE	T&EO TASK NUMBER	PAGE NUMBER
MANEUVER		
Execute Attack	7-3-1100	5-7
Execute Assault	7-3-1103	5-10
Perform Movement to Contact	7-3-1101	5-14
Perform Overwatch/Support by Fire	7-3-1108	5-18
Execute Disengagement	7-3-1122	5-23
Knock Out a Bunker	7-3-1113	5-27
Clear Trench Line	7-3-1114	5-32
Perform Raid	7-3-1102	5-38
Perform Anti-armor Ambush	7-3-1143	5-44
Perform Hasty Ambush	7-3-1144	5-50
Perform Point Ambush	7-3-1145	5-54
Execute Defense	7-3-1115	5-60

Table 5-1. List of Platoon and Squad T&EOs.

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BOS AND_TASK TITLE	T&EO TASK NUMBER	PAGE NUMBER
MANEUVER (Continued)		
Occupy Assembly Area	7-3-1136	5-67
Move Tactically	7-3-1134	5-71
Perform Actions at Danger Areas	7-3-1125	5-78
Perform Tactical Road March	7-3-1123	5-82
Perform Passage of Lines	7-3-1125	5-86
Clear a Building	7-3-1110	5-92
Defend MOUT/Building	7-3-1118	5-96
Perform Stay-Behind Operations	7-3-1116	5-102
Perform Linkup	7-3-1128	5-106
Perform Infiltration/Exfiltration	7-3-1137	5-110
Take Action on Contact	7-3-1107	5-114
Break Contact	7-3-1111	5-118
React to Ambush	7-3-1112	5-121
Perform Delay	7-3-1119	5-124
Perform Relief Operations	7-3-1124	5-128
Perform Airborne Assault	7-3-1127	5-133
Perform Operations With Armored Vehicles	7-3-1140	5-137
Perform Air Assault	7-3-1126	5-140
FIRE SUPPORT		
Employ Fire Support	7-3-1200	5-148
INTELLIGENCE		
Reconnoiter Zone	7-3-1004	5-153
Reconnoiter Area	7-3-1003	5-157
Reconnoiter Route	7-3-1005	5-161
Perform Surveillance From an Observation Post	7-3-1008	5-165
Perform Screen	7-3-1006	5-169
MOBILITY/SURVIVABILITY		
Breach an Obstacle	7-3-1402	5-172
Perform Waterborne Operations	7-3-1408	5-175
Perform NBC Operations	7-3-1406	5-179
Construct an Obstacle	7-3-1404	5-189
Maintain Operations Security	7-3-1409	5-193
Establish a Roadblock/Checkpoint	7-3-1401	5-198
Conduct Initial Breach of a Mined Wire Obstacle	7-3-1403	5-203
AIR DEFENSE		
Defend Against Air Attack	7-3-1301	5-209
COMBAT SERVICE SUPPORT		
Perform Combat Service Support Operations	7-3-1501	5-212
Process Enemy Prisoners of War/Captured Materiel	7-3-1503	5-220

Table 5-1. List of Platoon and Squad T&EOs, Continued.
(NOTE: Entire table is not shown.)

5-3

ARTEP 7-***-10-MTP

ELEMENT: PLATOON/SQUAD

TASK: PERFORM PASSAGE OF LINES (7-3-1125) (FM7-8)

ITERATION: 1 2 3 4 5 M (Circle)

COMMANDER/LEADER ASSESSMENT: T P U (Circle)

CONDITIONS: The platoon leader receives a company OPORD that requires the platoon to conduct a passage of lines forward or rearward. The enemy can attack with indirect fire, aircraft, or company sized mounted or dismounted forces. The OPORD provides guidance stating the command level authorized to accept each level of accident risk from low to extremely high. Some iterations should be performed in MOPP4.

TASK STANDARDS: The platoon moves personnel and equipment through the stationary unit at the time specified in the order. The platoon main body is not surprised by the enemy during departure of friendly lines. Platoon losses are minimized by risk management of METT-T hazards during mission planning and execution.

TASK STEPS AND PERFORMANCE MEASURES	GO	NO GO
*1. The platoon leader initiates planning and coordination for the operation. a. Arranges for a specific time and location for coordinating the passage of his platoon with the stationary platoon leader (squad leaders, FO, and platoon sergeant should be included). b. Develops a plan that reduces the disruption of both his platoon and the stationary platoon. c. Identifies most likely METT-T hazards and controls to avoid or minimize risk. Elevates to company commander for decision those hazard controls that are beyond his authority to implement. *2. The platoon leader or platoon sergeant meets with the stationary platoon. a. .Provides the platoon's identification. b. Provides the size of the platoon. c. Provides the time(s) of departure and return. d. Provides the area of the unit's operation. *3. The platoon leader or platoon sergeant coordinates with the stationary platoon leader. a. Plans for exchange of enemy intelligence. b. Plans for reconnaissance of the position. c. Plans for exchange of tactical plans. d. Plans for exchange of communications information.		

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TASK STEPS AND PERFORMANCE MEASURES	GO	NO GO
e. Plans for recognition signals for the passage, both near and far.		
f. Plans for guides (down to squad level) and traffic control measures.		
g. Plans for security measures for the passage.		
h. Plans for specific control measures for the passage to include: contact points, passage lanes, passage points, release points, and assembly areas (rearward passage),		
i. Coordinates fire support responsibilities and fire plans.		
j. Determines transfer of responsibility or action on enemy contact during the passage of lines.		
k. Coordinates CSS (items left on the positions).		
l. Checks with other leaders who will be operating in the same area or adjacent areas, and exchanges any information that will assist them with their operation.		
m. Plans for exchange of information about controls implemented to reduce risk of hazards identified.		
4. During reconnaissance, the platoon leader and squad leaders locate all key positions and routes.		
a. Locate passage lanes.		
b. Locate passage point.		
c. Locate obstacles and safety lanes.		
d. Locate release points.		
e. Locate assembly areas (for rearward passage).		
f. Locate contact points, start points, and routes.		
g. Locate positions of the stationary force during the passage.		
h. Locate CS and CSS elements (CP, OPs, and anti-armor and mortar positions).		
i. Locate enemy positions.		
j. Identify environmental conditions that could result in injury to personnel or damage to equipment.		
k. Develops, communicates, and implements controls for new hazards as they are discovered.		

ARTEP 7-***-10-MTP

TASK STEPS AND PERFORMANCE MEASURES	GO	NO GO
*5. Platoon leader maintains OPSEC during the operation. a. Ensures the reconnaissance and other activities do not reveal the operation to the enemy. b. Moves the platoon to a secure position as designated in the primary coordination meeting by the stationary leader. *6. Platoon leader issues a contingency plan prior to reentry passage and before moving out to make final coordination. a. Briefs squads on what is happening and what is going to happen. b. Confirms chain of command. c. Identifies actions to be taken on contact. d. Identifies actions to be taken in the absence of the leader. e. Provides time schedule, suspense, and any limits on action. f. Briefs squads on controls for hazards identified and confirms understanding of actions to implement controls. 7. Platoon moves, at the designated time, to a covered and concealed position near the contact point. a. Links up with guides that lead the security element from the contact point(s) to the release point(s). b. Clears the area forward of the release point(s) to the first covered and concealed position using the security element(s). c. Moves forward to the release point(s), when the area is cleared. d. Ensures the guides identify and account for all personnel passing through the passage point(s), contact point(s), and release point(s). e. Ensures hazard controls are implemented and enforced. f. Develops, communicates, and implements controls for new hazards as they are discovered.		
*8. The platoon sergeant counts the platoon through the release points. a. Provides the number of personnel in the platoon. b. Tells how long to wait at the release point. c. Confirms the running password. d. Ensures movement is continuous throughout the passage.		

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TASK STEPS AND PERFORMANCE MEASURES	GO	NO GO
e. Conducts a security halt after the platoon has moved beyond the stationary platoon unit's FPF. f. Assesses platoon's risk management effectiveness in minimizing losses. Identifies improvements and initiates actions to implement. *9. Collocated platoon leaders observe critical areas, make timely decisions, and facilitate battle handover. a. Ensure the platoon sergeant does not move forward from the release point until the leader is sure that he will not have to withdraw through the passage point. b. Ensure the squads link up when separate passage points were used and platoon moves to the objective or ORP after the link up. *10. Platoon leader directs the platoon to make a reentry through friendly lines. a. Establishes a reentry point. **NOTE:** If in contact with the enemy, the platoon does not halt. Contact party or guides from the stationary platoon leads the platoon through the passage point(s), or long range recognition signals are used to keep moving. b. Contacts the forward unit by radio and tells them , by use of arranged code word, that the platoon is ready to reenter. **NOTE**: The platoon leader may keep the platoon outside of friendly lines until daylight. **NOTE:** Before reentry, if radio communications are possible, a reconnaissance and security team uses the challenge and password to contact an OP. The OP then contacts the stationary platoon leader. If no communications can be established and no OPs can be found, the platoon leader directs a small security team to reconnoiter for the contact point. c. Confirms the message is acknowledged, and directs a security team to the contact point. **NOTE**: The security team establishes contact with the guide (far and near recognition signals). The security team signals the platoon forward, or goes back and leads the platoon to the passage point. d. Directs the platoon sergeant to count and identify each squad as they pass through the passage point. e. Follows the guides, without halting, to a secure area behind the stationary platoon.		

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TASK STEPS AND PERFORMANCE MEASURES	GO	NO GO
*11. Platoon leader reports to the CP of the stationary platoon. He gives the commander tactical information concerning the commander's area of responsibility. *12. Platoon leader rejoins the platoon and moves to a secure area. a. Debriefs the platoon. b. Consolidates and reorganizes as required.		

"*" Indicates a leader task step.

TASK PERFORMANCE/EVALUATION SUMMARY BLOCK							
ITERATION	**1**	**2**	**3**	**4**	**5**	**M**	**TOTAL**
TOTAL TASK STEPS EVALUATED							
TOTAL TASK STEPS "GO"							
TRAINING STATUS "GO"/"NO-GO"							

SUPPORTING INDIVIDUAL TASKS

Reference	Task Number	Task Title
STP 21-1-SMCT	051-191-1501	Perform Individual Camouflage
	301-348-1050	Report Information of Potential Intelligence Value
	071-326-0502	Move Under Direct Fire
	071-326-0503	Move Over, Through, or Around Obstacles (Except Minefields)
	071-326-0510	React to Indirect Fire While Dismounted
	071-326-0511	React to Flares
	071-326-0513	Select Temporary Fighting Position
	071-331-0815	Practice Noise, Light, and Litter Discipline
	071-331-0804	Perform Surveillance Without the Aid of Electronic Devices
	071-331-0801	Challenge Persona Entering Your Area
	113-571-1022	Perform Voice Communications
STP 21-24-SMCT	031-503-4004	Prepare and Submit NBC 4 Reports
	051-193-1013	Neutralize Booby Traps
	061-283-1002	Locate a Target by Grid Coordinates
	061-283-6003	Adjust Indirect Fire
	113-573-8006	Use an Automated Communication Electronic Operations Instruction (CEOI)

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SUPPORTING INDIVIDUAL TASKS

Reference	Task Number	Task Title
7-11BCHM14-SM-TG	061-283-1004	Locate Target by Shift From a Known Point
	071-052-0005	Operate a Night Vision Sight AN/TAS-5
	071-315-0003	Operate a Night Vision Sight AN/PVS-4
	071-315-0030	Operate Night Vision Goggles AN/PVS-5
	071-315-0091	Operate a Thermal Viewer AN/PAS-7
	071-331-0808	Identify Threat Weapons
	071-326-0501	Move as a Member of a Fire Team
	071-326-5606	Select an Overwatch Position
	071-701-0004	Supervise Use of Night Vision Devices
	113-573-4003	Encode and Decode Messages Using KTC 600(*) Tactical Operations Code
	113-573-4006	Use the KTC 1400(*) Numerical Cipher/Authentication System
7-11BCHM14-SM-TG	071-326-5502	Issue a Fragmentary Order
	071-326-5503	Issue a Warning Order
	071-326-5603	Conduct Movement Techniques by a Platoon
	071-326-5605	Control Movement of a Fire Team
	071-326-5611	Conduct the Maneuver of a Squad
	071-420-0005	Conduct the Maneuver of a Platoon
	071-410-0010	Conduct a Leader's Reconnaissance
	071-410-0012	Supervise Occupation of an Assembly Area
	071-410-0020	Plan for Use of Supporting Fires

OPFOR TASKS AND STANDARDS

TASK: COUNTER PASSAGE OF LINES

CONDITIONS: The OPFOR squad is ordered to establish a defense to prevent passage of enemy forces. The squad may operate separately or as part of a larger unit

STANDARDS:

1. Delays the passage.

2. Prevents the platoon from moving all personnel through the stationary unit.

3. Engages the main body of either the moving or stationary unit during the passage.

(NOTE: Only one T&EO listed in this example.)

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CHAPTER 6

EXTERNAL EVALUATION

6-1. General. Evaluations are conducted to evaluate the unit's ability to perform its missions. This chapter is a guide for preparing evaluations. Using units may modify this evaluation, based on METT-T and other considerations as deemed appropriate by the commander. Selected T&EOs in Chapter 5 are used for evaluation which involves the total unit and employs a realistic OPFOR and the use of MILES. At the end of the evaluation, the commander can identify the strengths and weaknesses of his unit. These strengths and weaknesses are the basis for future training and resource allocations.

6-2. Preparing the evaluation. The commander must standardize evaluation procedures to accurately measure the unit's capabilities.

a. Preparing the Evaluation Instrument. The sample evaluation scenario in Table 6-1 contains the missions as well as the appropriate tasks necessary to develop the scenario and execute the evaluation. Figure 6-1 is a graphic representation of the scenario. Selective tailoring is required, because it is not possible to evaluate every task. The following procedures are suggested for developing the evaluation.

DISMOUNTED PLATOON EVALUATION SCENARIO

EVENT	ACTION	ESTIMATED TIME ALLOTTED		PROPOSED TIME FRAME
1	Conduct preevaluation activities (for example, install, align, and troubleshoot MILES equipment; conduct inspections, draw equipment and ammunition).	Before start time		
2	Occupy Assembly Area	1 hr.	Day 1	1700
3	Receive Company OPORD	1 hr.		1800
4	Prepare for Combat	4 hrs.		1900
5	Perform Passage of Lines	2 hrs.		2300
6	Move Tactically	3 hrs.	Day 2	0100
7	Cross Water Obstacle	1 hr.		0400
8	Assault	1 hr.		0500
9	Consolidate and Reorganize - Intermediate AAR	1 hr.		0600
10	Receive Company FRAGO	2 hrs.		0700
11	Perform Helicopter Movement	2 hrs.		0900
12	Occupy Objective Rally Point	1 hr.		1100
13	Perform Area Ambush - Intermediate AAR	10 hrs.		1200
14	Receive Company FRAGO	2 hrs.		2200
15	Move Tactically	1 hr.		2400
16	Cross Danger Area	1 hr.	Day 3	0100
17	Occupy Patrol Base	3 hrs.		0200
*	Administrative Move to AAR Site	1 hr.		0500

Table 6-1. Sample Evaluation Scenario.

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DISMOUNTED PLATOON EVALUATION SCENARIO

EVENT	ACTION	ESTIMATED TIME ALLOTTED	PROPOSED TIME FRAME
18	After Action Review	2 hrs.	0600
19	ENDEX		0800

*Total Time 39 hrs.

* Movement time between evaluated actions will vary and is not completely accounted for.

Table 6-1. Sample Evaluation Scenario, Continued.

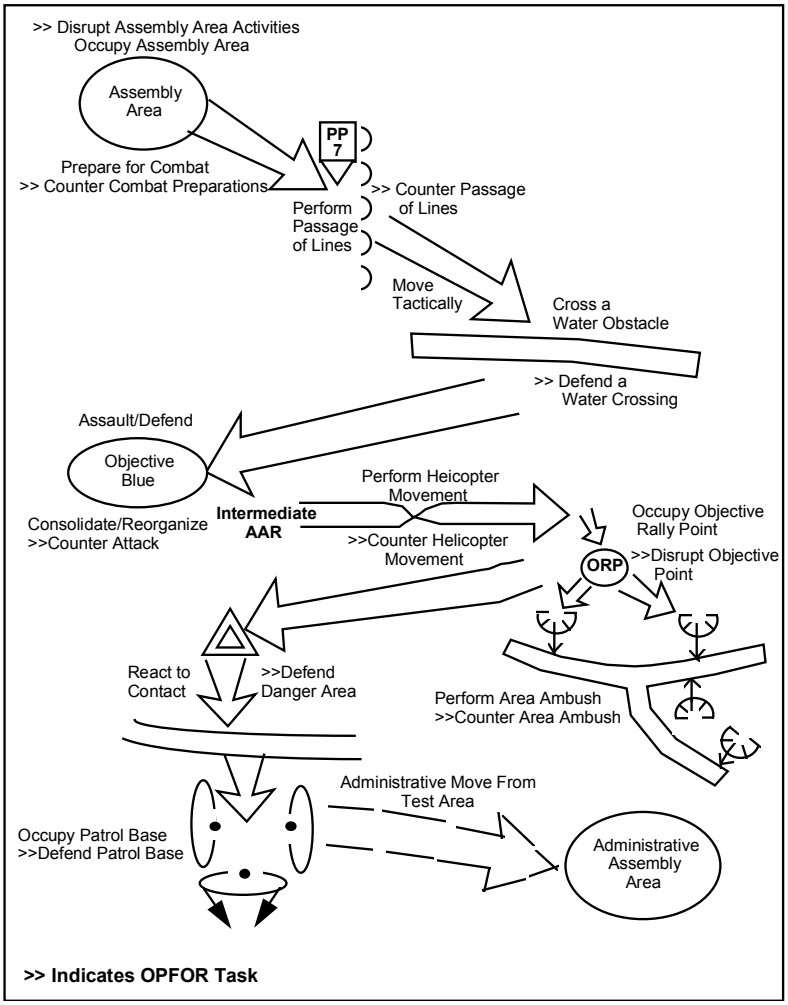

Figure 6-1. Example graphic scenario.

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(1) Identify the missions for evaluating each echelon or element, using Table 2-1 in Chapter 2. Record the selected missions in the UPW, Figure 6-2.

Unit:______________________________						Date:____________
No.	Unit Mission/Task	_____ Section/ Squad	_____ Section/ Squad	_____ Section/ Squad	_____ Section/ Squad	Unit Overall Rating & Remarks
		GO NO-GO	GO NO-GO	GO NO-GO	GO NO-GO	
		GO NO-GO	GO NO-GO	GO NO-GO	GO NO-GO	
		GO NO-GO	GO NO-GO	GO NO-GO	GO NO-GO	
		GO NO-GO	GO NO-GO	GO NO-GO	GO NO-GO	
		GO NO-GO	GO NO-GO	GO NO-GO	GO NO-GO	
		GO NO-GO	GO NO-GO	GO NO-GO	GO NO-GO	
		GO NO-GO	GO NO-GO	GO NO-GO	GO NO-GO	
		GO NO-GO	GO NO-GO	GO NO-GO	GO NO-GO	
		GO NO-GO	GO NO-GO	GO NO-GO	GO NO-GO	
		GO NO-GO	GO NO-GO	GO NO-GO	GO NO-GO	
		GO NO-GO	GO NO-GO	GO NO-GO	GO NO-GO	
		GO NO-GO	GO NO-GO	GO NO-GO	GO NO-GO	
* If more space is required for remarks use the back side of this form.						

Figure 6-2. Example unit proficiency worksheet.

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(2) List each mission on a Task Summary Sheet, Figure 6-3.

TASK SUMMARY SHEET			
MISSION:			
TASK TITLES	**T&EO NUMBER**	**EVALUATION**	
		GO	**NO GO**
Observer/Controller's Signature:_____			
NOTE: A separate task summary sheet will be prepared for each mission evaluated. Observer/Controller's comments may be placed on an enclosure to the task summary sheet.			

Figure 6-3. Example Task Summary Sheet.

6-4

(3) Select the tasks for the evaluation of every mission. List the selected tasks on the Task Summary Sheets which are used for recording the results of the evaluation.

(4) Compile the selected missions and tasks in the order they logically occur in the detailed scenario. Group the selected missions and tasks in parts for continuous operations, Table 6-1, Sample Evaluation Scenario. Parts can be interrupted at logical points to assess MILES casualties and conduct in-process AARs.

b. Forecasting and Requisitioning Resources. Adequate training ammunition, equipment and supplies must be forecasted and requisitioned. Table 6-2 is a consolidated list of support requirements for this evaluation. It is based on experiences with the scenario in Table 6-1. The evaluating headquarters will prepare its own consolidated support requirements.

CONSOLIDATED SUPPORT REQUIREMENTS

AMMUNITION	QUANTITY
5.56-mm (blank)	150 rounds/man
5.56-mm (blank)	400/SAW
7.62-mm (blank)	400/M60 machine guns 600/coaxial machine guns
Caliber .50 (blank)	200 rounds per M2 machine gun
Hand grenade (practice)	2 per rifleman
Hand grenade fuse (practice)	2 per rifleman

OTHER ITEMS	QUANTITY
Batteries - BA 200 (6-volt)	12 ea.
Batteries - BA 3090 (9-volt)	140 ea.

MILES EQUIPMENT	PLATOON	EVALUATORS	OPFOR
APC	4		2
M2/M3 set	4		2
Caliber .50 system	4		2
M19 blank firing adapter	4		2
M16 systems	32		6
M21 blank firing adapter (7.62-mm coaxial machine gun)	4		1
M60 machine gun systems	2		1
SAW (squad automatic weapon)	8		1
Controller guns		5	
Small-arms alignment fixture		1	
Dragon	3		1
Viper	6		2

Table 6-2. Consolidated support requirements.

c. Selecting and Preparing the Field Evaluation Site. Required size, type of terrain, OPFOR requirements, and administrative requirements are the basis for site selection. For this evaluation an area of **** meters X **** meters was selected. The OPFOR is positioned according to threat doctrine. The site must provide space for the administrative area required to support the evaluation.

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d. Planning Indirect Fire Simulation. Because it greatly influences the outcome of battles, reaction to indirect fire is an important consideration of the evaluation. Indirect fire simulation requires considerable planning to achieve realism.

(1) The fire marker control system outlined in TC 25-6 is a recommended method of simulating indirect fire. Due to the amount of required resources, this method may be difficult to support.

(2) The commander may use the evaluation control headquarters method or the simulation without OPFOR method to evaluate the unit's ability to react to indirect fire. If the evaluation control headquarters method is used, the OPFOR will initiate a call for fire to the evaluation control headquarters which will simulate the tactical FDC. The control headquarters would then relay the delivery data to the O/Cs who would mark the impact of the round with artillery simulators and assess appropriate casualties. If an OPFOR is not used, the O/C may ignite artillery simulators and observe the unit's reactions. The FM 25 series provide assessment and computation tables which may be used to determine casualties. Indirect fire simulation must be realistic and limited to what the unit could reasonably expect under combat conditions.

6-3. Selecting the observer controllers.

a. O/Cs must know the unit's missions, organization, equipment, and employment. Senior O/C should be at least equal in rank to the unit commander and have successfully performed in that specific or similar command position.

b. The following are minimum rank and experience requirements for O/Cs:

(1) Company O/C will be an officer with company command experience.

(2) Platoon or section O/Cs will be LT or NCO with platoon or section experience.

(3) Recorder will be an officer or NCO at the evaluation control headquarters who receives "kill" information or results and time data from the O/Cs.

6-4. Training the observer controllers. O/Cs standardize administration of the evaluation by understanding the following functional areas:

a. Evaluation Design. Each part is designed to evaluate specific missions or tasks within the overall scenario. O/Cs must thoroughly understand the evaluation and correctly implement it.

b. MILES. Each O/C, regardless of position, must have full knowledge of the unit's weapons and vehicles and must also thoroughly understand the MILES system being used. The unit commander is responsible for ensuring that all MILES equipment is functional before each part of the scenario.

c. Evaluation Control System. This system ensures that the evaluation is administered in a consistent and standardized manner and that correct data is collected for the final evaluation. It includes the following elements:

(1) Rules of engagement.

(2) O/C duties and responsibilities.

(3) Communication systems.

(4) Evaluation data collection plan.

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6-5. Recording external evaluation information.

a. The evaluating headquarters develops the data recording instruments for the O/Cs. The Unit Data Sheet, Figure 6-4, documents demographic information which may reflect on a unit's performance. The Environmental Data Sheet, Figure 6-5, documents weather information in order to compare missions under differing environmental conditions. The Personnel and Equipment Loss Report, Figure 6-6, documents information that may affect the unit's degree of success during engagements with the OPFOR.

UNIT DATA SHEET

1. UNIT DESIGNATION: DATE:

2. UNIT LEADERS: (CIRCLE MOST CORRECT ANSWER)

POSITION	RANK	TIME IN UNIT (MONTHS)				
PLATOON LEADER	1LT/2LT	1-3	4-6	7-12	13-18	≥19
PLATOON SERGEANT	SFC/SSG	1-3	4-6	7-12	13-18	≥19
1ST SQUAD LEADER	SSG/SGT	1-3	4-6	7-12	13-18	≥19
2ND SQUAD LEADER	SSG/SGT	1-3	4-6	7-12	13-18	≥19
3RD SQUAD LEADER	SSG/SGT	1-3	4-6	7-12	13-18	≥19

3. UNIT STRENGTH (EXCLUDING LEADERS):

4. EQUIPMENT SHORTAGES (MAJOR ITEMS):

5. COMMENTS:

OBSERVER CONTROLLER's SIGNATURE:

Figure 6-4. Example Platoon Unit Data Sheet.

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ENVIRONMENTAL DATA SHEET
EXERCISE NUMBER AND DESCRIPTION:
DATE/TIME EXERCISE STARTED:
DATE/TIME EXERCISE ENDED:
1. WEATHER CONDITIONS: (Circle appropriate description) Clear Partly Cloudy Cloudy Hazy Rain Snow Fog Other: Temperature:
2. GROUND CONDITIONS: (Circle appropriate description) Dry Wet Ice Snow Other:
3. LIGHT CONDITIONS: (Circle appropriate description) Day Night Moon Phase: 1/4 1/2 3/4 Full Average Range of Visibility Due to Light:
4. TERRAIN: (Circle appropriate description) Flat Rolling Mountains Jungle Desert Urban Arctic Other: Top Soil: Sandy Rocky Clay Other: Average Range of Visibility Due to Terrain:
5. REMARKS:

Figure 6-5. Example environmental data sheet.

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PERSONNEL AND EQUIPMENT LOSS REPORT					
Mission Title or Task Number	Date/Time of Enemy Contact	Friendly KIA/WIA	Enemy KIA/WIA	Friendly Vehicles Destroyed	Enemy Vehicles Destroyed
COMMENTS:					

Figure 6-6. Example Personnel and Equipment Loss Report.

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b. The senior O/C has the overall responsibility for preparation of the external evaluation. This evaluation is based on his own findings and his subordinate O/C's input. Subordinate O/Cs use the task evaluation criteria (T&EO from Chapter 5 and Task Summary Sheets), to determine overall proficiency in their particular areas. The senior O/C compiles the external evaluation results as prescribed by the evaluating commander. Deviations from the task standard assessed by the company O/C may be addressed in the senior O/C comments portion of the UPW.

6-6. Selecting and training the OPFOR. The selection and training of the OPFOR is crucial to the success of a standardized evaluation. The OPFOR provides one of the control measures that influences the conditions under which the evaluation is administered. The unit should face an opponent which realistically resembles the threat in strength, weapons, and skill.

a. Selection. Any qualified Skill Level 1 or 2 soldier can serve as OPFOR. Ideally, they should be a small cohesive unit under the control of their leader or commander.

b. Training. The OPFOR must understand the following six major areas:

(1) Installation and operation of the MILES devices.

(2) Rules of engagement.

(3) Threat small unit tactics.

(4) Training scenarios.

(5) OPFOR weapons and equipment, if available.

(6) Safety.

c. OPFOR Strength.

(1) Offense. Using MILES, the unit should outnumber the OPFOR three to one if an attack is to be successful. If the OPFOR is stronger than this ratio, only the most exceptional unit will be successful. They must be armed with weapons capable of defeating any of the unit's assets. As a general rule, the OPFOR should be strong enough to offer the unit a realistic challenge, but one that the unit can defeat when proper tactics are employed.

(2) Defense. The OPFOR, at a minimum, should have a three-to-one ratio of superiority, because anything less will not have sufficient weapons and ammunition to conduct a successful attack. They must be more than merely a series of targets to be destroyed. The OPFOR should be allowed to plan their own attack for each mission and not be forced into a "canned" attack that all units will quickly defeat. Once the OPFOR establishes their plan, they must use the same plan for all other like units for that event in order to maintain the objectivity and standardization of the evaluation.

6-7. Conducting the evaluation. Evaluations are divided into three distinct areas. Each area requires a different degree of preparation and coordination.

a. Preevaluation.

(1) The senior O/C and all other O/Cs must recon the evaluation area to know the unit's boundaries, disposition of the OPFOR, and the most likely avenues of approach throughout the field evaluation site's area of operation.

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(2) The unit must prepare an OPORD and FRAGO to control the exercise. An order is prepared for each mission in the evaluation scenario. These can be prepared by using the skeleton orders contained in the STXs contained in Chapter 4.

(3) Unit preparatory activities include installation and troubleshooting of MILES equipment, loading vehicles, conducting inspections, and performing other logistics and administrative actions, as required.

(4) The OPFOR is placed in position and briefed while the unit is conducting its preparatory activities.

(5) In this evaluation scenario, the unit is issued a movement order to move to an assembly area. When the assembly area has been occupied, the OPORD is issued. The O/Cs should make an equipment functions check after the unit occupies the assembly area and after the unit leaders have issued their instructions.

b. Evaluation.

(1) The evaluation team controls the evaluation in two ways. First, it uses measures established in both the movement order and in paragraphs 3 and 5 in the OPORD or FRAGO. Second, the team controls the evaluation through the team commander (simulated by the senior O/C for this evaluation), on the team net. The team does not control in the traditional sense, instead it accompanies the unit as observers. Only the senior O/C has direct verbal contact with the unit commander. All other O/Cs do not speak to, aid, advise, point out positions, or in any way influence the unit's performance, except for a possible or actual safety issue or emergency. O/Cs are neutral throughout the evaluation.

(2) Once the senior O/C issues the OPORD and movement order, the unit commander executes the events and actions prescribed in the first part of the evaluation scenario within the estimated time. From this point on. all successive parts begin with a FRAGO.

(3) The senior O/C terminates a part when the unit has completed all the events and actions in a particular area or has suffered so many casualties or damage that the part cannot be completed. The O/C must record the reasons for the termination in the margin of the O/C's Task Summary Sheets and report his action to the evaluation control headquarters. In the sample evaluation scenario, the completion of each event or action is indicated by "conducting sustainment operations". During this period, the senior O/C will direct the unit to remain in position while "replacements" (personnel and equipment designated as killed or destroyed), are sent forward to reconstitute the unit. At this time, O/C must perform the following actions:

(a) Inspect all MILES equipment, record "kill" codes and reset equipment. Any damaged or inoperative MILES equipment is replaced.

(b) Resolve all casualty data to determine the time, place, number, and cause of casualties. This information is reported to the recorder in the evaluation control headquarters.

(c) Debrief the unit to resolve questions. Afterwards, the senior O/C directs the unit to continue its mission after it receives a FRAGO or OPORD for the next part.

(4) These guidelines should be followed by the O/Cs.

(a) Report major "kills" (vehicles, groups).

(b) Report major weapons fired. Together with reporting major kills, this is the best method for determining direct fire effectiveness. Both significant firings and hits are reported to the evaluation control headquarters.

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(c) Enforce rules of engagement.

(d) Observe critical tactical events of time. O/Cs must spot and record any action that might have an effect on later performance or mission outcome.

(e) Record travel routes and unit's location.

(f) Inform OPFOR controllers of the unit's location, direction, and intent. This is necessary to enable OPFOR action to be controlled in accordance with the desired sequence of events.

(g) Enforce safety.

(h) Terminate mission.

c. Postevaluation. After the evaluation is terminated, the unit moves to an assembly area and performs the following actions:

(1) The unit O/C debriefs subordinate O/Cs and compiles all data (evaluator packets), for the evaluation.

(2) The unit O/C must complete the task summary sheets.

(3) The unit O/C must turn in all completed O/C packets (with the O/C scoring system), to control headquarters for recording and analysis.

(4) The unit O/C must conduct an AAR of the unit's performance.

(5) Each element O/C should conduct an AAR of his element's performance.

6-8. Conducting the after action review.

a. General. At the completion of each evaluation part, the AAR leader provides feedback to the unit in order to increase and reinforce learning.

b. Feedback. Because all members of the unit participate in an AAR, each member becomes a source of feedback. This provides a richer "data base" for key points. The AAR leader will draw information from each member which becomes an important part of the discussion. This information is the basis for discussing alternate courses of action.

c. Preparing the AAR. AAR preparation involves five steps:

(1) Review training orders and objectives. Training objectives are the focus of the discussion of the exercise results. The FRAGOs and OPORDs included in the exercise design implement these objectives. The O/C should be familiar with the objectives, FRAGOs and OPORDs so that he can note orders given by leaders of the evaluated unit and its subordinate elements that either implement these objectives or deviate from them.

(2) Observe the exercise. This is an active process. The emphasis is on noting those actions that make the difference between the unit's success or failure. The O/C does not need to remain close to the unit leader, since more can be seen from high ground near the lead element's location or along the unit's route of march. Because unit orders identify important activities and checkpoints, the O/C must be present when the commander issues the order. The O/C should position himself where he can best observe anticipated critical events. Examples of critical events include:

(a) Conducting a road march.

(b) Crossing a radiologically contaminated area.

(c) Performing unit supply operations.

(d) Responding to an NBC attack.

(3) Select the site and assemble the participants. After the exercise, select a site for the AAR. If possible, hold the AAR where the majority of action occurred, where most of the critical events took place (normally where the OPFOR was positioned), or where the terrain can be observed. Usually, the OPFOR or unit objectives are suitable for assembling the players and conducting the AAR.

(4) Debrief the O/Cs. While the units are moving to the selected site, the O/Cs should be debriefed. The senior O/C must have a complete understanding of what happened in the exercise. The fourth step in AAR preparation is to obtain a detailed description of the exercise's events in the order in which they occurred.

(5) Review the events. After the senior O/C has a sound understanding of what happened during the exercise, he reviews the events which are ranked in terms of their relevance to the training objectives and their contributions to the exercise outcome. He selects as many events as can be covered in detail during the time allowed for the AAR and places them in chronological order.

d. Conducting the AAR. Conducting the AAR requires five steps:

(1) Organize the participants. When the O/C and AAR leader assembles the participants, he groups them according to their organization in the exercise. Each subordinate element's O/C is with the element for which he is responsible.

(2) State the training objectives. The AAR leader makes a brief statement of the training objectives for the exercise. These are described as specifically as possible. He states any additional teaching points that he intends to cover during the AAR. These should be limited to three or four key points in order to keep the AAR focused and prevent it from becoming excessively long.

(3) Lead the discussion. The AAR leader guides the discussion of the events in their order of occurrence. diagrams help players visualize the exercise development. The AAR leader starts by sketching the main terrain features and, as the AAR proceeds, have the participants draw routes of advance, objectives, and locations of engagements. Each event is discussed in detail to make teaching points about the unit's performance during the event. In an effective AAR, the AAR leader should:

(a) Avoid giving a critique or lecture.

(b) Guide the discussion by asking leading questions.

(c) Suggest the players describe what occurred in their own terms.

(d) Suggest the players discuss not only what happened, but how it happened and how it could be done better.

(e) Focus the discussion to ensure that important tactical lessons are made explicit.

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(f) Relate events to subsequent results.

(g) Avoid detailed examination of events not directly related to major training objectives.

(h) Encourage the participants to use diagrams to illustrate teaching points and to show routes, phase lines and objectives.

(i) Prohibit players form offering self-serving excuses for inappropriate tactical actions.

(4) Review the sequence of the events associated with the hazards of the risk assessment made prior to the exercise.

(a) Were effective controls put in place to avoid accidents.

(b) Was training realism reduced through artificial control measures.

(c) Were all participants aware of hazards down to the lowest level.

(d) Did any hazard present itself that was not identified, and what was done to overcome it.

(e) Discuss each incident of fratricide or near fratricide and how it can be avoided in the future.

(5) Summarize key points. The AAR leader briefly summarizes teaching points in terms of training objectives covered in the AAR. After the summary, he can have a private conversation with the unit commander regarding his strengths and weaknesses, and what he can do to improve his performance and that of his unit. A good AAR leader:

(a) Maintains order and discipline.

(b) Reviews the training objectives.

(c) Addresses important events are as they occurred and how the unit could have done them better. During the discussion, the leader avoids a detailed examination of events not directly related to the training objective.

(d) Traces the chain of events so all participants understand the results of mistakes. One mistake is often the partial cause of another.

(e) Clearly relates tactical events to teaching points.

(f) Involves participants in the discussion.

(g) Clearly and concisely gives summary and new training objectives.

(h) Reinforces points by using sketches, diagrams, or terrain models in the AAR.

e. Reference materials for conducting an AAR are TC 25-6, TC 25-20, and FM 25-101.

Appendix C
Sample Drill Book

Headquarters
Department of the Army

ARTEP 44-***-21-Drill

DRILLS FOR THE
AVENGER SQUAD

DISTRIBUTION RESTRICTION: Distribution approved for pubic release; distribution is unlimited.

ARMY TRAINING AND
EVALUATION PROGRAM
44-***-21-Drill

*ARTEP 44-117-21-Drill
HEADQUARTERS
DEPARTMENT OF THE ARMY
Washington, DC, 15 June, 1992

DRILLS
FOR THE AVENGER SQUAD

TABLE OF CONTENTS

*This publication supersedes ARTEP 44-***-21-Drill, 31 March, 1985.

ARTEP 44-***-21-DRILL

PREFACE

1. Standardized drills are an essential element to the success of the Avenger squad on the battlefield. These drills provide performance measures and a collective sequential set of procedures that when applied Army wide, will minimize the impact caused by turnover in personnel. These drills are for use by the trainers at battery and platoon level to train their squads to do the selected collective tasks correctly and rapidly. Drill training is an inseparable part of peacetime combat-oriented training which improves proficiency in mission-oriented individual and collective tasks, maintains high combat readiness, and promotes cohesive teamwork and esprit de corps.

2. This drill publication is separated into chapters with applicable information to assist the squad leader in training his squad on drills and battlefield concepts.

3. The target audience for these drills includes leaders, trainers, and evaluators of Avenger platoons organized under TOEs 44-117L, 44-175L, 44-413L, and 44-435L.

4. Unless this publication states otherwise, masculine nouns and pronouns do not refer exclusively to men.

5. The proponent of the publication is USAADASCH. Submit recommended changes to improve this publication on DA Form 2028 to : Commandant, United States Army Air Defense Artillery School, ATTN: ATSA-DTF, Fort Bliss, TX 79916-0002.

Appendix C
Sample Drill Book, Continued

ARTEP 44-***-21-Drill

CHAPTER 1

UNIT TRAINING

1-1. General. The goal of training is to produce combat ready units that respond rapidly to known or suspected enemy activity and defeat the enemy. Drill training is a key factor in achieving that goal. It describes a training method for small units. This method requires training individual tasks, leader tasks, and collective tasks before the conduct of critical wartime missions, Leaders should tailor training to realistic, challenging, and attainable goals, while increasing the difficulty of conditions as the unit becomes more proficient.

a. A battle drill is a collective action executed by a platoon or smaller element without application of a deliberate decision making process. The action is vital to success in combat or critical to preserving life. The drill is initiated on a cue, such as an enemy action or simple leader's order, and is a trained response to the given stimulus. It requires minimal leader orders to accomplish and is standard throughout like units.

b. A crew drill is a collective action that a crew of a weapon or piece of equipment must perform to use the weapon or equipment successfully in combat or to preserve life. This action is a trained response to a given stimulus such as a simple leader order or the status of the weapon or equipment. It requires minimal leader orders to accomplish and is standard throughout the Army.

c. These drills have many advantages:

(1) They are based on unit missions and the specific tasks, standards, and performance measures required to support mission proficiency.

(2) They build from simple to complex and focus on the basics.

(3) They link how-to-train and how-to-fight at small unit levels.

(4) They provide an agenda for continuous coaching and critiquing.

(5) They develop leaders and build teamwork and cohesion under stress.

(6) They enhance the chance for individual and unit survival on the battlefield.

1-2. Training guidance. Battle and crew drills are trained using a talk-through, walk-through, and run-through method. You, of course, must be a master of the drill to train your soldiers to execute it. You may wish to periodically talk your soldiers through the drill - explaining each soldier's role. Then have them go through it slowly, on open ground, correcting any mistakes as the go. Whenever possible, train in a new environment in which you would be expected to execute the drill in wartime. Do it frequently in MOPP. Be tough on yourself and your soldiers. A good team executes instantly and with precision. Your team will pay a high price for failure to do so.

1-3. Safety considerations. During the conduct of a drill all soldiers and leaders must be safety conscious. All O/C's and trainers have the responsibility to ensure that all training is conducted in a safe manner. Prior to the beginning of a drill, all personnel must be briefed on specific safety measures to be observed during the conduct of the exercise.

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1-4. Evaluation information. The purpose of evaluating a drill is to determine if the unit can perform all of the performance measures within the allowed standards. During evaluations, concentrate on the units performance, not that of specific individuals. The best location for an O/C is one in which he can observe the actions of the entire unit. Use the drill book as a checklist. We recommend you do not use local checklists as they can become negative training tools.

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CHAPTER 2

BATTLE DRILLS

2-1. General. A battle drill is a collective action executed by a platoon or smaller element without the application of a deliberate decision making process. The action is vital to success in combat or critical to preserving life.

2-2. Battle Drill 44-4-D001.

TASK: Perform Target Engagement From a Stationary (Hasty or Deliberate) Position. (44-4-D001).

CONDITIONS: Squad has occupied a hasty or deliberate position. The driver or gunner identifies hostile fixed-wing, incoming or crossing aircraft. Driver announces "Target, ___o'clock, (states "high" or "low"), or gunner announces, "Contact,____ o'clock, (states "high" or "low")."

STANDARDS: The squad must complete the performance measures for engaging hostile aircraft within 8 seconds, at all MOPP levels. Measure time from when the gunner announces, "Contact," to when the gunner presses the trigger switch.

SUPPORTING INDIVIDUAL TASKS: See Appendix A, "Individual Task-to-Drill Matrix."

ILLUSTRATIONS: N/A.

SETUP INSTRUCTIONS:

a. Resources.

(1) One Avenger with BII.

(2) Stinger missile, caliber .50 machine gun, and ammunition. For training, use captive flight trainers and dummy ammunition.

(3) Aerial target.

(4) Individual weapons, NBC protective clothing, and equipment.

b. Training Site. Perform drill in an area that allows good observation (both air and ground), fields of fire, cover, concealment, and communications.

c. Unit Instructions. The squad is providing air defense for an asset. The system is in the ENGAGE mode, emplaced (hasty or deliberate) (44-4-D006). The squad is not expected to remain in this location for very long. The OPORD has provided current PTL and SOF. Early warning has been received.

TALK-THROUGH INSTRUCTIONS:

a. Orientation. The task is to perform target engagement in a tactical situation. The squad must also apply weapons control status and hostile criteria before engaging within the prescribed time limits.

b. Safety/Fratricide. Squad must be prepared for any malfunction that would cause a potential hazard to personnel or equipment while firing. The ARM switch will remain in the SAFE position until aircraft is tracked.

2-1

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c. Demonstration (optional). If another squad has successfully performed the drill, have that squad demonstrate the drill. Describe its action using the performance measures as a guide. After the demonstration, summarize.

d. Explanation.

(1) Tell the squad members what their duties are in the drill.

(2) Read the performance measures of the drill to the squad.

(3) Have squad members explain their performance measures to ensure that they understand them.

WALK-THROUGH INSTRUCTIONS:

a. Have squad take their positions and initiate the engagement. Correct any mistakes the squad members make as they go. Do not proceed until the drill is done correctly. After the squad demonstrates their proficiency at a slow pace, let them do it faster. Remember, however, that safety is never sacrificed for speed.

b. Initiating cue. Driver announces "Target, ___o'clock, (states "high" or "low"), or gunner announces, "Contact,____ o'clock, (states "high" or "low")."

PERFORMANCE MEASURES:

STEP	DRIVER	GUNNER
1	Alerts the gunner by announcing, "Target ___ o'clock, (states "high" or "low")," or acknowledges "Roger" when the gunner first detects a target.	Slews the turret to the direction of the aircraft. Announces "Contact, ____ o'clock, (states "high" or "low")," upon detecting the aircraft.
2	Attempts to visually identify the aircraft; notifies gunner of identification.	Challenges the aircraft with IFF. Announces the response, "Friendly" or "Unknown." NOTES: •If in WEAPONS FREE, and the target is not positively identified as FRIENDLY, the gunner may engage. •If in WEAPONS TIGHT, the gunner identifies the target according to the prevailing hostile criteria. If the target is declared FRIENDLY or UNKNOWN, the gunner will hold fire. If declared HOSTILE the gunner may engage. •If in WEAPONS HOLD, do not fire except in self-defense or in response to a formal order.
3	Monitors radio command net, EWBN, support unit net, and intercom.	Makes an engagement decision.
4		Presses and releases the left thumb switch to select missile mode or select missile AUTO-track.
5		Positions the target within the WFOV reticle, then switches to NFOV. Presses and releases right thumb switch to FLIR AUTO-track, or manually tracks the target as required.

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PERFORMANCE MEASURES: (Continued)

STEP	DRIVER	GUNNER
6		Sets ARM switch to ARM (up) and LASER ENABLE switch to ENABLE (up).
7		Presses and releases left trigger switch to uncage missile and activate laser. NOTE: Position the target in the center of the sight reticle, if tracking the target with the optical sight.
8		Ensures that the driven reticle moves with the target.
9		Listens for a steady pitched acquisition tone on the intercom.
10		Verifies that the fire permit symbol appears on the FLIR screen or optical sight. NOTES: •If after 2 seconds, the fire permit symbol is not present and the target is above the horizon appearing to be within missile launch range, use manual range estimation procedures and continue engagement. •If target is low on the horizon and appears to be within the missile launch range, set GUN MODE switch to GND (AUTO).
11		Presses and holds right trigger switch for 5 seconds. The system super elevates, lead angle is inserted and missile fires.
12	Assesses the engagement. If no other targets are present, resumes search of the SOF not searched by gunner. If targets are present, goes to step 1. Sends appropriate report to platoon CP.	For multiple targets, goes to step 1. If no other targets are present, sets ARM switch to SAFE (down). Returns to PLT and searches SOF.

COACHING POINT: If needed, correct the soldier after he completes a performance measure. Soldiers complete performance measures in sequence, and like-numbered performance measures simultaneously.

RUN-THROUGH INSTRUCTIONS: The trainer should practice the soldiers in this drill until they can perform the drill according to the standards without the drill book. The initial run through should be conducted slowly. The soldiers change positions in order to learn all steps and standards.

PERFORM: When the soldiers can perform this drill according to the standards, they should be evaluated by the platoon leader.

SUPPORTED T&EOS.

ARTEP NUMBER	T&EO NUMBER	T&EO TASK TITLE
44-117-31-MTP	44-2-0308	Take Active Air Defense Measures Against Hostile Aircraft

(Note: Complete list of supported T&EOs not provided.)

44-***-21-Drill

CHAPTER 3

CREW DRILLS

3-1. General. A crew drill is a collective action that a crew of a weapon system or piece of equipment must perform to use the weapon or equipment successfully in combat or to preserve life.

3-2. Crew Drill 44-4-D005.

TASK: Prepare for Road March (44-4-D005).

CONDITIONS: Squad has occupied a tactical hasty or deliberate position. Squad has been conducting combat operations. Driver announces "Prepare for road march."

STANDARDS: The squad must complete the performance measures for preparing to road march in 6 minutes and 30 seconds in MOPP 1 or 2, and 8 minutes in MOPP 3 or 4. Measure time from when the driver announces, "Prepare for road march."

SUPPORTING INDIVIDUAL TASKS: See Appendix A, "Individual Task-to Drill Matrix."

ILLUSTRATIONS: N/A.

SETUP INSTRUCTIONS:

a. Resources.

(1) One Avenger with BII.

(2) Stinger missile, caliber .50 machine gun, and ammunition. For training, use captive flight trainers and dummy ammunition.

(3) Individual weapons, NBC protective clothing, and equipment.

b. Training Site. Perform drill in an area that allows good observation (both air and ground), fields of fire, cover, concealment, and communications.

c. Unit Instructions. The system is in the ENGAGE mode, TURRET DRIVE switch to STAB MODE, LASER ENABLE switch to ENABLE, UNCAGE switch light is set to AUTO or as required, TRACK switch light is set to AUTO/MAN as required, and HLCPTR switch is off, and GUN mode is set to AIR (AUTO). RCU POWER On switch is on.

TALK-THROUGH INSTRUCTIONS:

a. Orientation. The task is to move to a new position. To do this in a tactical situation, the squad must place the Avenger in a march order configuration within the prescribed time limits. Before beginning the drill training, ensure that each squad member knows the purpose of the drill and is briefed on safety awareness.

b. Safety/Fratricide. Squad must be extremely cautious at all times when climbing into or out of the turret or vehicle cab, especially during wet weather. The ARM switch will remain in the SAFE position to prevent accidental firing of the machine gun.

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c. Demonstration (optional). If another squad has successfully performed the drill, have that squad demonstrate the drill. Describe its action using the performance measures as a guide. After the demonstration, summarize.

d. Explanation.

(1) Tell the squad members what their duties are in the drill.

(2) Read the performance measures of the drill to the squad.

(3) Have squad members explain their performance measures to ensure that they understand them.

WALK-THROUGH INSTRUCTIONS: Engage target from a stationary position.

a. Have squad take their positions and drill. Correct any mistakes the squad members make as they go. Do not proceed until the drill is done correctly. After the squad demonstrates their proficiency at a slow pace, let them do it faster. Remember, however, that safety is never sacrificed for speed.

b. Initiating cue. Driver announces "Prepare for road march."

PERFORMANCE MEASURES:

STEP	DRIVER	GUNNER
1	Commands "Prepare for road march".	Upon hearing the prepare for road march command, turns the radio and auto amplifier off, if vehicle is not running.
2	From a deliberate emplacement, perform step a. From a hasty emplacement perform step b: a. Places DRIVE INTERLOCK switch to SAFE. Repositions the cable and RCU into vehicle. Repositions the driver's mirror. Places DRIVE INTERLOCK switch to ENABLE. b. Secures the communications cable and repositions the driver's side mirror.	Positions turret to 0 degrees azimuth. Exits the turret. Helps driver in putting the RCU cable. Reenters the turret.
3	Enters driver's compartment and starts the vehicle, if required.	Clears all inputs that were previously set into the CDT by entering proper codes.
4	Connects his CVC cable to the RCU. Fastens his seat belt.	Turns the radio and audio amplifier on, if previously turned off.
5	Makes a communications check with the gunner by announcing, "Communications check".	Acknowledges communications check by replying, "Roger."
6	Monitors all vehicle indicators.	Ensures that TURRET DRIVE switch is set to STAB MODE.
7	Announces, "Prepare for road march".	
8	Contacts the platoon CP and reports, "Prepared for road march".	

COACHING POINT: If needed, correct the soldier after he completes a performance measure. Soldiers complete performance measures in sequence, and like-numbered performance measures simultaneously.

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RUN-THROUGH INSTRUCTIONS: The trainer should practice the soldiers in this drill until they can perform the drill according to the standards without the drill book. The initial run through should be conducted slowly. The soldiers change positions in order to learn all steps and standards.

PERFORM: When the soldiers can perform this drill according to the standards, they should be evaluated by the platoon leader.

SUPPORTED T&EOS.

ARTEP NUMBER	T&EO NUMBER	T&EO TASK TITLE
44-117-31-MTP	44-2-7229	Prepare to Deploy.

(Note: Complete list of supported T&EOs not provided).

Appendix C
Sample Drill Book, Continued

44-***-21-Drill

Appendix A
Individual Task-to-Drill Matrix

1. General. This matrix identifies individual tasks from STP 44-14S14-SM-TG which support each battle and crew drill. Individual tasks which support a drill are indicated by a "B" or "D" in the column below the drill. "B" are tasks trained prior to the drill, and "D" are tasks trained during the drill. Skill levels 1 and 2 tasks are shown for these drills. Both squad positions perform these tasks.

	Battle Drill Number and Title				Crew Drill Number and Title	
Skill Levels 1 and 2 Individual Task Number and Soldier Manual Task Title	44-4-D001 Perform Target Engagement From Stationary Position	44-4-D002 Perform Target Engagement From Remote Position	44-4-D003 Perform Ground Engagement While Moving	44-4-D004 Perform Ground Engagement Using XM-293 Mach Gun	44-4-D005 Prepare for Road March	44-4-D006 Prepare for Road March (Remote)
441-006-10 Visually Identify Threat and Friendly Aircraft	B	B	B	B		
441-006-1150 Plot Fire Unit's Position and Early Warning Information on MSCS						
441-092-1013 Perform Avenger Search Procedures	B	B	B	B		
441-092-1014 Engage Hostile Aircraft With the Avenger	B	B	B	B		
441-092-2001 Select a Firing Position						
113-578-2064 Operate Radio Set AN/VRC-12 or AN/VRC-47 With TSEC KY-57	B	B	B	B	B	B
441-092-1035 Operate Intercommunications Set AN/VIC-1	B	B	B	B	B	B
441-092-1009 Perform Driver/ Observer Duties During Road March					B	B

B-Trained before the drill. D-Trained during the drill.
Individual Task-to-Drill Matrix

A-1

44-***-21-Drill

	Battle Drill Number and Title				Crew Drill Number and Title	
Skill Levels 1 and 2 Individual Task Number and Soldier Manual Task Title	44-4-D001 Perform Target Engagement From Stationary Position	44-4-D002 Perform Target Engagement From Remote Position	44-4-D003 Perform Ground Engagement While Moving	44-4-D004 Perform Ground Engagement Using XM-293 Mach Gun	44-4-D005 Prepare for Road March	44-4-D006 Prepare for Road March (Remote)
441-092-1010 Perform Gunner Duties During Road March					B	B
441-092-1011 Perform Driver/Observer Duties During Emplacement						
441-092-1010 Perform Gunner Duties During Emplacement						
551-721-1346 Drive an M998 Series Vehicle			B		B	B
441-006-1150 Plot Fire Unit's Position and Early Warning Information on MSCS	B					
441-092-1015 Perform Gunner Emergency Procedures For Hangfire/Misfire (Avenger)					B	B
441-092-1017 Perform Immediate Action for a Malfunction on the XM-293 Machine Gun						
441-092-2001 Select a Firing Position	B					

B-Trained before the drill. D-Trained during the drill.
Individual Task-to-Drill Matrix, Continued.
(Note: Entire matrix not shown.)

Appendix C
Sample Drill Book, Continued

44-***-21-Drill

Appendix B
Illustrations

1. Visual Signals. Because of battlefield noise, visual signals may be the only method of communications within the squad. This also reinforces noise and light discipline procedures.

a. Arm and Hand Signals. Use arm-and-hand signals as much as possible when communicating within the squad. Figure 1 illustrates standard arm-and-hand signals.

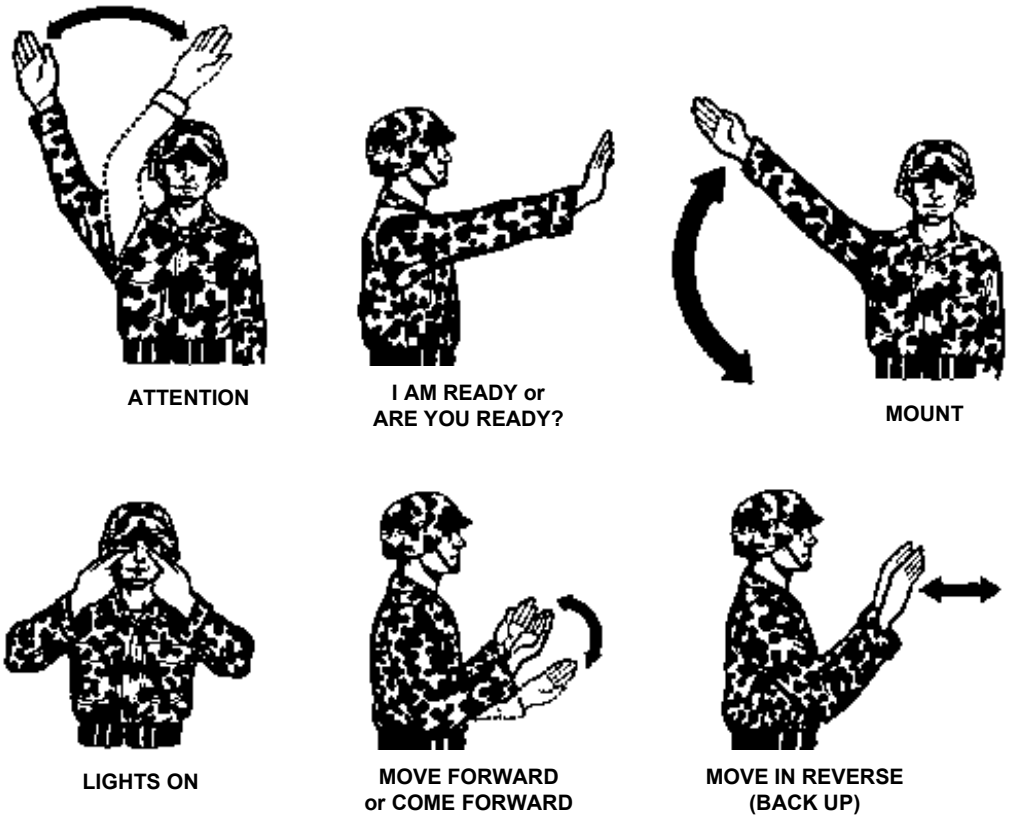

Figure 1. Standard Arm and Hand Signals.

B-1

44-***-21-Drill

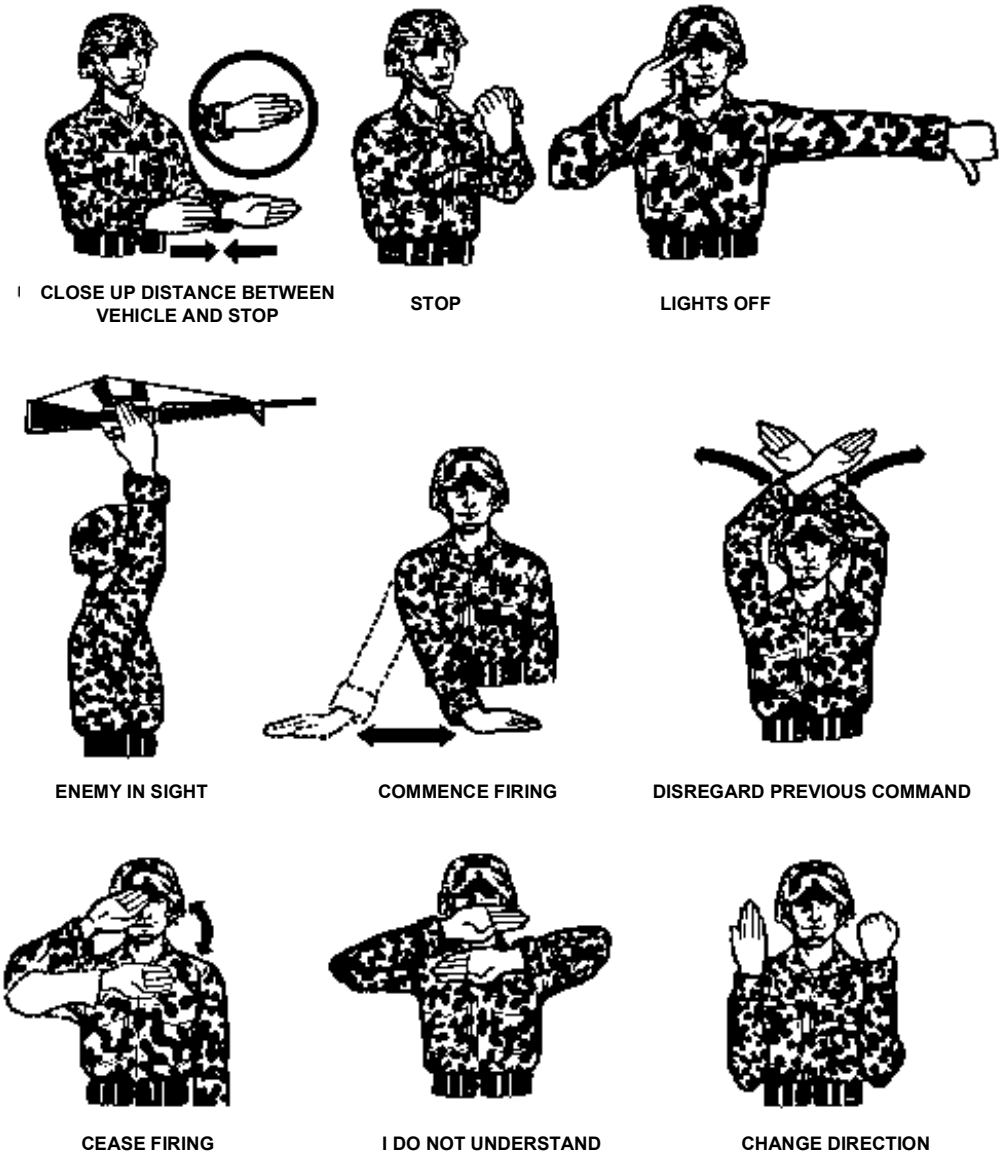

Figure 1. Standard Arm and Hand Signals, Continued.

B-2

44-***-21-Drill

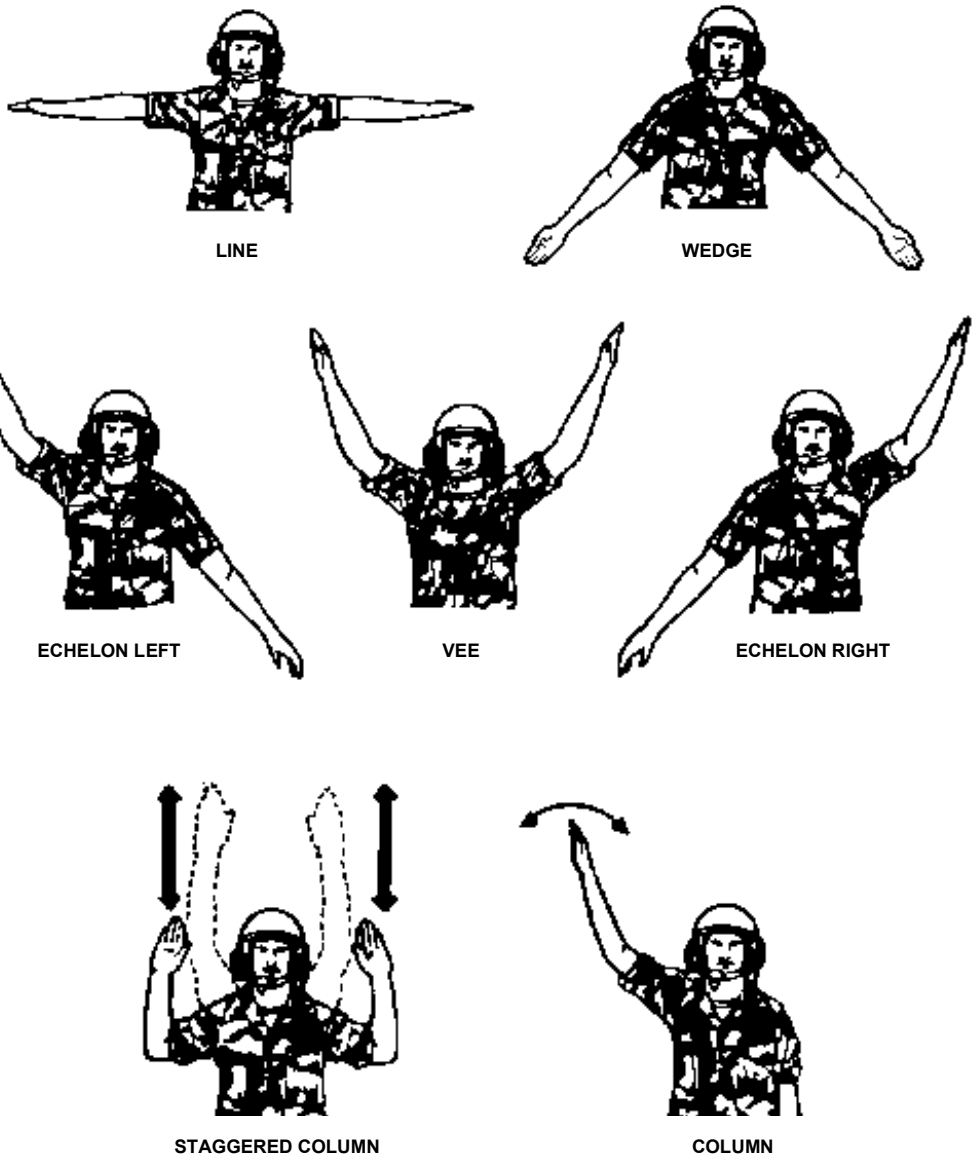

Figure 1. Standard Arm and Hand Signals, Continued.

B-3

44-***-21-Drill

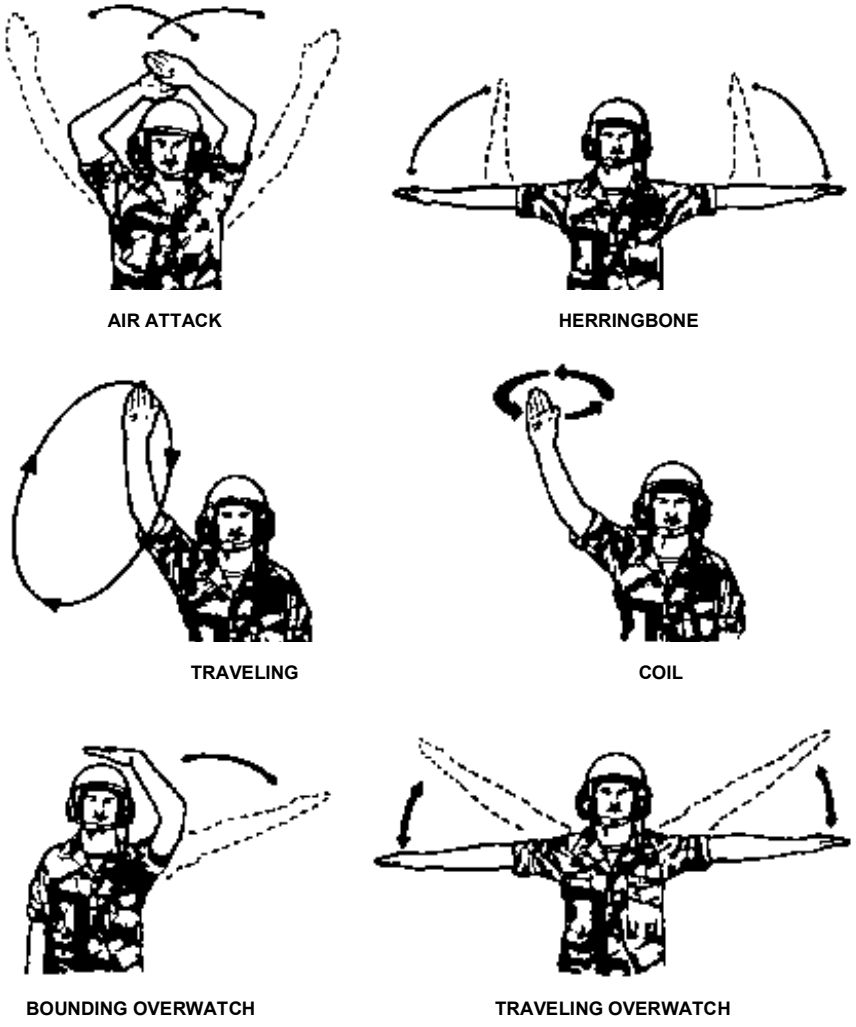

Figure 1. Standard Arm and Hand Signals, Continued.

B-4

44-***-21-Drill

b. Use flag signals for signaling at longer distances. Figure 2 illustrates standard flag signals.

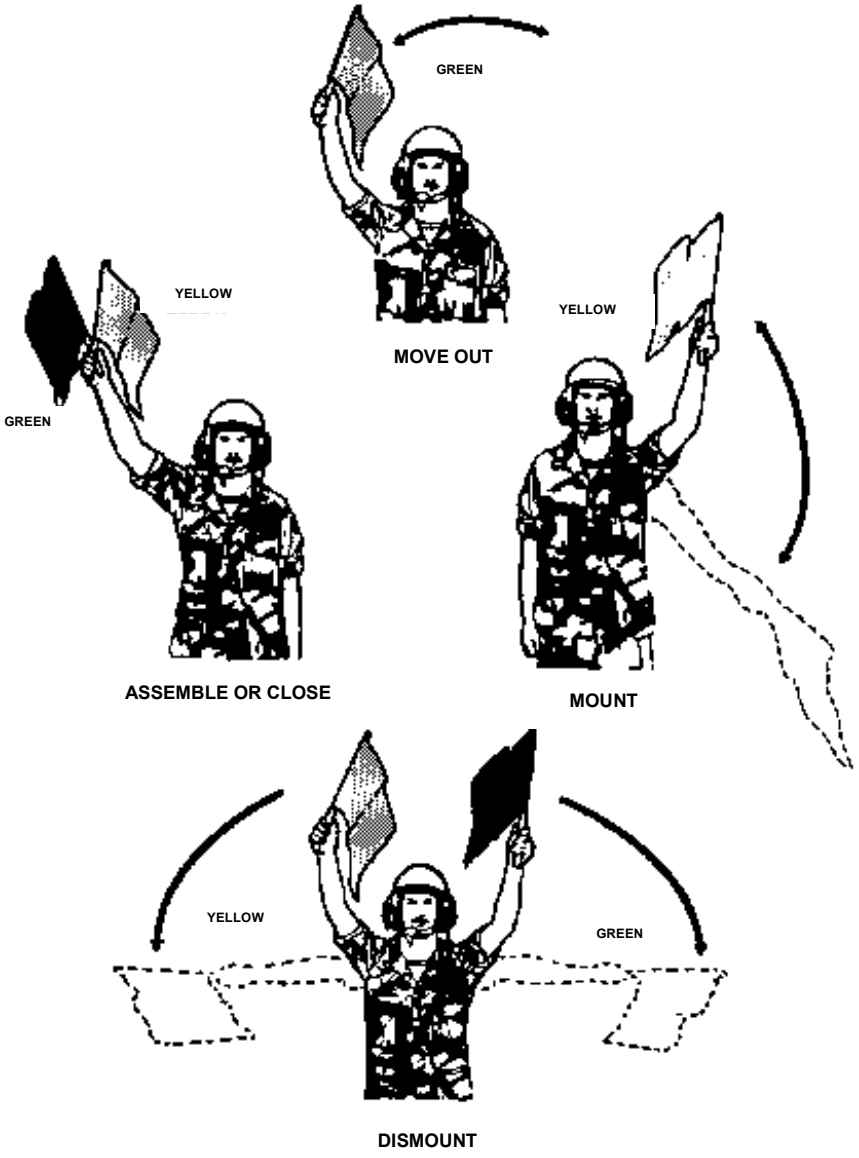

Figure 2. Standard Flag Signals.

B-5

44-***_21-Drill

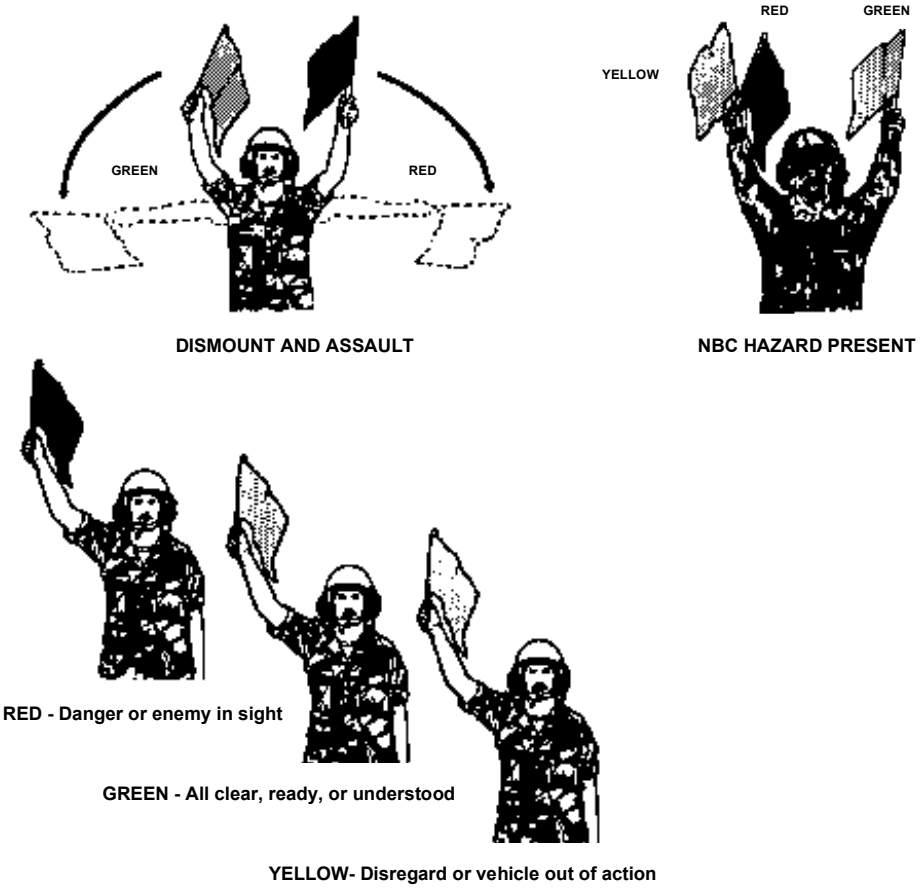

Figure 2. Standard Flag Signals, Continued.

B-6

44-***-21-Drill

c. Flashlight signals. Flashlight signals can be used to control movement when visibility is limited. Figure 3 illustrates standard flashlight signals.

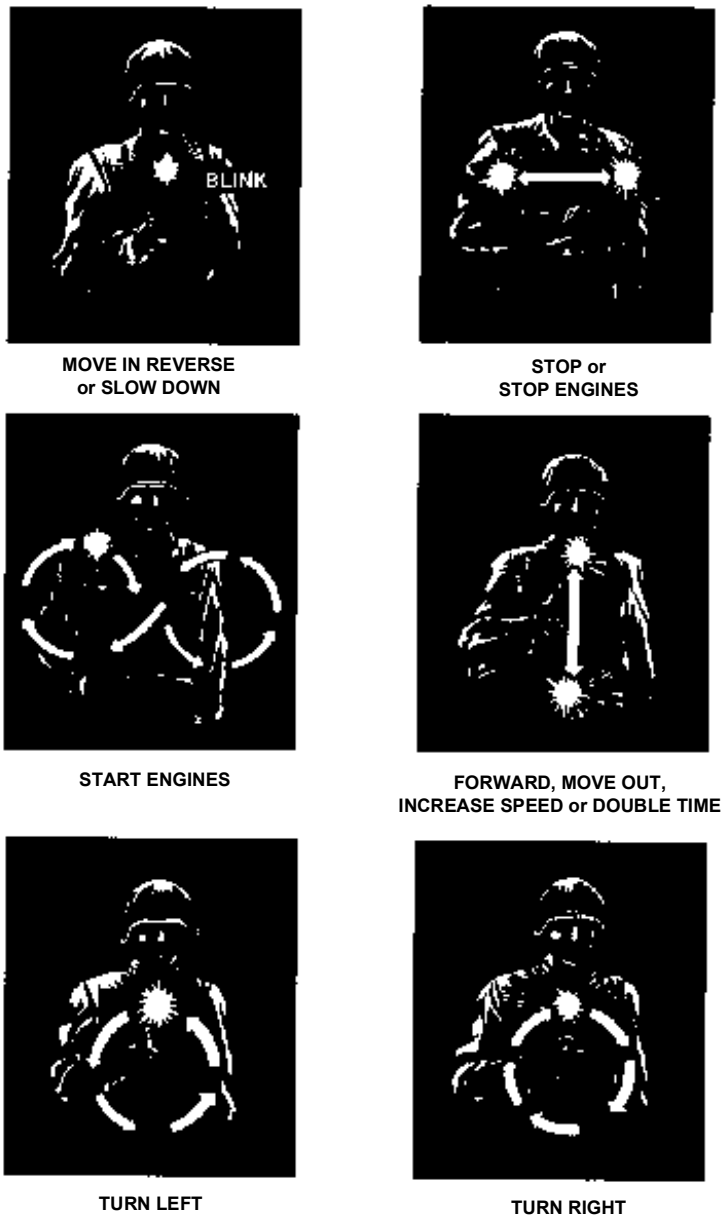

Figure 3. Standard Flashlight Signals

44-***-21-Drill

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B-8

Appendix D
Sample Chapters 3, 4 and 6 For a Battalion MTP

ARTEP 10-***-MTP

Chapter 3
Training Plans

3-1. General. This chapter describes the use of the MTP for development of battalion training plans and provides a mission outline. It is designed to assist commanders in preparing training plans for critical wartime missions. FM 25-100 and FM 25-101 provide detailed information on training management and should be used with the MTP for developing battalion training plans.

3-2. Long range planning. Long-range planning allows commanders to provide timely input to the Army's various training resource systems and to provide a general direction for the training programs. The long-range plan consists of a calendar covering the planning period and the commander's formal guidance. To develop a long-range plan, the commander must first develop the unit's METL and conduct a training assessment. These two actions are the two principal inputs at the beginning of the planning process. FM 25-100 and other FM 25-Series manuals provide guidance on developing a unit's METL.

a. Develop Unit METL. The first step in developing a METL is analyzing all specified and implied missions and other guidance. Next, the unit's wartime mission is restated. After analyzing the unit's missions and external directives, a list of tasks is identified which must be accomplished if the unit is to successfully accomplish its wartime mission. Subordinate commanders and key NCOs participate in selecting the tasks. The task list is developed using the missions contained in Chapter 2 of the MTP, missions assigned to the battalion by contingency plans and missions directed by higher headquarters' guidance. The commander reviews the task list and selects tasks that are essential to the unit's wartime mission. The selected tasks are forwarded to the next higher headquarters for approval. The tasks selected are the unit's METL, Figure 3-1.

(1) INTELLIGENCE.
1. Develop intelligence estimates.

(2) MANEUVER.
1. Perform advance and quartering party activities.
2. Establish battalion command post (forward).
3. Coordinate movement of subordinate elements.
4. Supervise establishment of subordinate elements and battalion headquarters.
5. Establish logistics operations centers and administrative areas.

(3) MOBILITY AND SURVIVABILITY.
1. Supervise operations security program.
2. Supervise nuclear, biological, and chemical defense operations.

(4) COMBAT SERVICE SUPPORT.
1. Coordinate internal logistics.
2. Combat battlefield stress.
3. Perform risk management procedures.
4. Provide personnel service support.
5. Provide administrative service support.
6. Conduct command religious support program.

(5) COMMAND AND CONTROL.
1. Conduct mission analysis.
2. Conduct intelligence preparation of the battlefield.
3. Formulate feasible courses of action (S2/S3 Section).
4. Provide intelligence support (S2/S3 Section).
5. Develop personnel estimate (S1 Section).

Figure 3-1. Example Battalion METL.

3-1

ARTEP 10-***-MTP

6.	Develop logistics estimate.
7.	Develop support operations estimate.
8.	Develop supporting commander's operations estimate. Conduct hasty risk management (general assessment to support estimate).
9.	Prepare OPLAN/OPORD and annexes. Conduct deliberate risk management (detailed assessment to support OPLAN/OPORD).
10.	Develop road movement order.
11.	Develop occupation plan.
12.	Plan battalion area tactical operations.
13.	Plan rear area operations.
14.	Establish communications.
15.	Maintain communications.
16.	Provide command and control.
17.	Operate base cluster operations.
18.	Direct response to threat actions.
19.	Direct area damage control operations.

Figure 3-1. Example Battalion METL, Continued.

b. Establish Training Objectives. After the METL is identified, the commander establishes training objectives. The training objectives are conditions and standards which describe the situation or environment and ultimate outcome criteria the unit must meet to successfully perform the tasks. Training objectives and standards for METL can be obtained from the MTP, STP, higher headquarters command guidance and local SOP.

c. Conduct Training Assessment. The training assessment is the commander's continuous comparison of the unit's current proficiency with the proficiency required to fight and win on the battlefield. The commander, his staff and subordinate commanders assess the organization's current proficiency on mission essential tasks against the required standard. The commander then indicates the current proficiency by rating each task as "T" (Trained), "P" (Needs Practice), "U" (Untrained), or "?" (Unknown). The outcome of the training assessment identifies the unit's training requirements, Figure 3-2.

	CURRENT TRAINING STATUS BATTLEFIELD OPERATING SYSTEMS							**TRAINING STRATEGY**
	Intel	Maneuver	Fire Support	Mob & Surv	Air Defense	CSS	C_2	Overall
Mission Essential Tasks								
Supervise operations security program	P	T	P	P	T	U	U	P
Coordinate internal logistics	P	T	T	P	U	T	T	T
Conduct mission analysis	U	P	T	T	T	P	T	T
Conduct intelligence preparation of the battlefield	?	U	?	?	?	?	?	?
Legend T - Trained U - Untrained P - Needs Practice ? - Status Unknown								

Figure 3-2. Sample commander's training assessment.

Appendix D
Sample Chapters 3, 4 and 6 For a Battalion MTP

d. Develop Training Strategy and Commander's Guidance. The training strategy is developed using the outcome from the training assessment. With the training strategy, the commander and his staff establish training priorities by determining the minimum frequency each mission essential task will be trained during the upcoming planning period. It includes the commander's guidance which includes the commander's training vision. To develop unit goals, the commander must:

(1) Review higher commander's goals.

(2) Spell out in real-world terms what his unit will do to comply with the goals of higher commanders.

(3) List in broad terms his own goals for the unit. Figure 3-3 provides a sample of battalion goals.

-Attain and sustain proficiency in all MTP missions.

-Maintain a 90 percent OR rate.

-Attain and sustain a 100 percent crew gunnery qualification.

Figure 3-3. Example battalion goals.

e. Establish Training Priorities. Priorities are established for training METL tasks by basing the priorities on training status, the criticality of the task and the relative training emphasis the task should receive. Figure 3-4 provides a sample training priority list.

TASK	SOURCE	TRAINING PRIORITY
Conduct Mission Analysis	MTP	2
Formulate Feasible Courses of Action	MTP	3
Develop Intelligence Estimate	MTP	4
Develop Personnel Estimate	MTP	5
Command and Control	MTP	1

Figure 3-4. Example battalion training priority list.

f. Prepare Long-Range Planning Calendar. The long-range planning calendar is the coordinating tool for long-range planning. It is structured by long-range training events to identify time periods available for training mission essential tasks. The long-range planning calendar projects training events and activities of the unit for the upcoming 12 to 18 months. To prepare a long-range calendar, follow the steps outlined below:

(1) Select training events and activities to train the missions. At battalion-level, the commander must project events that will enable him to achieve his goals.

(2) Assign time for subordinate units to train. Subordinate leaders must be allowed to develop their training programs in support of the battalion training program.

(3) Examine various training alternatives to make optimum use of the training support available to the unit. Available training resources must be compared against higher headquarters directed training, battalion directed training events, and subordinate level projected training events. Resourcing tools available to the battalion commander are the BLTM, OPTEMPO, and STRAC.

ARTEP 10-***-MTP

(4) Obtain approval of long-range plans from petroleum group.

(5) Issue guidance. Training guidance is issued to the staff and subordinate units with the long-range training calendar. This training guidance supplements the long-range training calendar and generally includes:

(a) Training policies.

(b) Types of mandatory training.

(c) Training resource guidance.

(d) Quotas for centralized training (schools).

(e) Training goals.

3-3. Short-range planning. A short-range plan is prepared to address the immediate future (3 months). Short-range planning develops specific training objectives based on the goals and guidance prepared during long-range planning. The short-range plan adds more detail and may modify the long-range plan based on current assessments. Prepare the short-range plan as described below:

a. Review the training program, current unit proficiency, resources, and training environment.

(1) Review the training program described in the long-range planning process. This review determines if assessments made during long-range planning are still valid.

(2) Review previous short-range planning calendars for training accomplished, training preempted and lessons learned.

(3) Review current unit proficiency to update priorities.

(4) Review resources to determine if it is still possible to execute the program described on the long-range planning calendar.

(5) Review training environment again in this phase of planning because it takes on added importance as training events and activities approach. Factors that affect the training environment and that collectively impact on the training program are:

(a) Personnel assigned.

(b) Personnel turbulence.

(c) Morale.

(d) Education programs.

(e) Mandatory training.

(f) Visits, inspections, and tests.

(g) Supplies and equipment.

(h) Nonmission-related activities.

(i) Other programs.

b. Develop a detailed plan of action for short-range training plans. Prepare the detailed plan of action as described below:

(1) Examine events scheduled on the long-range training plan to determine if they are still valid.

(2) Transfer valid events to a short-range training planning calendar.

(3) Determine desired outcomes for scheduled events.

(4) Analyze missions to determine related individual, leader, and collective tasks.

(5) Determine if there are any weaknesses. Select tasks to correct these identified weaknesses and to sustain selected individual, leader and unit strengths, as necessary.

(6) Select the specific training objectives for missions and tasks to be trained. The T&EOs in Chapter 5 provide the commander with the training objectives.

(7) Prepare a short-range training planning calendar or 3 monthly schedules. The short-range training planning calendar provides a detailed plan of action for the specified period.

(8) Review short-range plans with petroleum group.

(9) Issue guidance. This guidance specifically addresses how training will be accomplished.

3-4. Near term planning. The final phase of planning is the execution of training. Using the short-range plan, prepare weekly training schedules.

a. Review the training program, unit proficiency, resources, and training environment. As in long-range and short-range planning, this review determines if previous assessments are still valid.

b. Finalize plans based upon the review of the training program. Determine the best sequence for training tasks, and complete the final coordination of the training events and activities.

c. Prepare trainers, O/Cs, OPFOR, and support personnel to know what is being trained, why it is being trained, and what their role in the training will be.

3-5. Training the HHC. Planning training for the HHC provides the commander with unique challenges. The most severe challenges are those that have to do with time and availability of personnel. The staff and headquarters detachment are involved in day-to-day operations and support of subordinate unit training. It is difficult to find the time to adequately address the training needs of these elements. These elements must be capable of fulfilling their roles in order for the battalion to perform its wartime missions. The strategy selected by the commander for training these elements must include an effective method of training individuals, staffs, leaders, and units.

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a. Training the Battalion (Staff Training).

(1) Training of the staff presents the greatest challenge within a constrained training environment. This MTP identifies the training objectives for the staff. The staff has numerous tasks to master to be effective. Examples of tasks that any staff must be able to perform are:

(a) Analyze terrain.

(b) Function as an effective team.

(c) Exchange information.

(d) Prepare estimates.

(e) Give appraisals.

(f) Make recommendations and decisions.

(g) Prepare plans.

(h) Issue orders.

(i) Coordinate and control unit operations.

(j) Supervise subordinate units.

(2) The strategy used to train the staff will vary based on the considerations used in planning training (such as level of proficiency and training support available). FM 25-101 contains detailed information on the conduct of exercises. Some methods of staff training include the following exercises.

(a) TEWT. TEWTs are low-cost, low-overhead exercises conducted in the field on actual terrain suitable for training units for specific missions. TEWTs are used by commanders to train subordinate leaders and staffs to analyze terrain and plan for the conduct of unit missions.

(b) MAPEX. MAPEXs are low-cost, low-overhead training exercises that allow commanders to train their staffs to perform essential integrating and control functions to support their decisions under wartime conditions. MAPEXs may be used to train the staff to exchange information, prepare estimates, give appraisals, make recommendations and decisions, prepare plans, and issue orders.

(c) CPX. CPXs are medium-cost, medium-overhead training exercises that may be conducted in garrison or a field location. CPXs normally use a battle simulation to drive the staff actions.

(d) FTX. FTXs are high-cost, high-overhead exercises conducted in the field under simulated combat conditions. Unit-conducted FTXs exercise the staff in coordination, control, and supervision of unit operations. They normally require the staff planning tasks to be completed before the exercise begins. Petroleum Group-conducted FTXs provide the best opportunity for the staff to combine all of its skills and perform as they would in wartime, responding to both higher and lower levels.

(3) At battalion level, a method to optimize staff and unit training is to integrate TEWTs, MAPEXs, CPXs, CFXs, and CALFEXs to prepare the orders and plans for upcoming battalion FTXs. This exercises the entire spectrum of the staff effectively and also makes optimum use of unit field training time. Each unit is different and only the commander can determine the best method of training his staff.

b. Training the Battalion. Training the battalion is a complex task requiring both unit and staff training programs. Normal day-to-day operations place a unique burden on the battalion commander to accomplish training. Elements cross staff lines and responsibilities. The battalion XO coordinates with the battalion commander to ensure individual soldiering tasks are being mastered.

3-6. Developing training exercises. Chapter 4 provides sample exercises for this battalion to use or modify to meet specific training needs. Since only an example FTX is contained in the MTP, it is necessary for the battalion to develop exercises for its own use. This section provides general procedures for the battalion staff to use for FTX preparation and for the battalion supporting STXs. Exercise plans are normally prepared during preparation of the short-range plan. Prepare the exercises as described below:

a. Selection of Missions and Tasks for Training. This was accomplished during the development of the long-range plan and refined during the development of the short-range plan.

b. Site Selection. Confirm selection of a training area.

c. Scenario Development. After missions and tasks are selected, prepare a detailed scenario for the exercise.

(1) List the missions and tasks and events in the preferred sequence of occurrence.

(2) Identify events necessary for the control of the exercise. These events would normally include issuance of orders, AARs, and any other administrative or logistics action necessary to conduct the exercise.

(3) Prepare the exercise overlays which show the sequence of actions and terrain to be used for each event.

(4) Determine the estimated time for each event using the overlay and scenario. The total time is determined to ensure that the scenario can be completed in the time allocated for the exercise.

d. Selection of O/Cs and OPFOR. O/Cs and OPFOR are normally required for every FTX and STX when MILES is used. It is difficult for a battalion to provide these from its own resources. When O/Cs and OPFOR must be provided from within the battalion, unit leaders may have to serve as the O/Cs for their units and the OPFOR may be selected from personnel or units not essential for attainment of the exercise objectives. Ideally, the higher headquarters should provide O/Cs and OPFOR.

e. Preparation of the Control Plan. Control plans are developed to coordinate the actions of the training units, OPFOR, and O/Cs. The scenario is used and a detailed control plan is prepared. The control plan consist of:

(1) Detailed schedules of OPFOR actions.

(2) Detailed instructions for the OPFOR.

(3) Detailed schedule of activities for units.

(4) OPORDs and FRAGOs for friendly units. Normally, friendly unit actions are controlled through the issuance of OPORDs and FRAGOs.

f. Preparation of the Evaluation Plan. All training is evaluated, either internally or externally. The evaluation plan identifies the tasks to be evaluated, by whom, and at what time. The evaluation will consist of:

(1) Specific instructions for the O/Cs.

(2) A sequential list of T&EOs to be evaluated by each O/C.

(3) Detailed time schedules for evaluation and AARs.

3-7. Mission outline. The mission outline is designed to provide a graphic portrayal of the relationship of the critical wartime mission to FTXs and STXs. This outline should assist the commander and staff in the preparation of training plans. Figure 3-5 is a sample mission outline for the battalion.

PETROLEUM SUPPLY BATTALION
MISSION OUTLINE
PROVIDE CLASS III BULK PETROLEUM SUPPORT

FTX
PROVIDE BULK PETROLEUM STORAGE AND DISTRIBUTION SUPPORT TO ASSIGNED AREA
10-1-E0001

STX PLAN CLASS III BULK PETROLEUM SUPPORT 10-1-E0002	STX DIRECT RELOCATION OF BATTALION 10-1-E0003	STX SUPERVISE ESTABLISHMENT OF BATTALION AREA OF OPERATIONS 10-1-E0004	STX DIRECT CLASS III BULK PETROLEUM OPERATIONS 10-1-E0005	STX DIRECT DEFENSE OF ASSIGNED AREA 10-1-E0006
Conduct Mission Analysis 10-1-1001	Develop Road Movement Order 10-1-1010	Develop Occupation Plan 10-1-1011	Plan Bulk Petroleum Operations 10-1-0113	Plan Rear Operations 10-1-1014
Conduct Intelligence Preparation of the Battlefield 10-1-1002	Coordinate Movement of Subordinate Elements 10-1-1018	Perform Battalion Advance/Quartering Party Activities 10-1-1015	Coordinate Bulk Petroleum Operations Support 10-1-0114	Supervise Operations Security Program 10-1-1038 Supervise Nuclear, Biological, and
Formulate Feasible Course of Action 10-1-1003		Establish Battalion Command Post (Forward) 10-1-1016	Conduct Quality Surveillance 10-1-0115	Chemical Defense Operations 10-1-1040

Figure 3-5. Example Petroleum Supply Battalion Mission Outline.

Appendix D
Sample Chapters 3, 4 and 6 For a Battalion MTP

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PETROLEUM SUPPLY BATTALION
MISSION OUTLINE
PROVIDE CLASS III BULK PETROLEUM SUPPORT

FTX
PROVIDE BULK PETROLEUM STORAGE AND DISTRIBUTION SUPPORT TO ASSIGNED AREA
10-1-E0001

STX PLAN CLASS III BULK PETROLEUM SUPPORT 10-1-E0002	STX DIRECT RELOCATION OF BATTALION 10-1-E0003	STX SUPERVISE ESTABLISHMENT OF BATTALION AREA OF OPERATIONS 10-1-E0004	STX DIRECT CLASS III BULK PETROLEUM OPERATIONS 10-1-E0005	STX DIRECT DEFENSE OF ASSIGNED AREA 10-1-E0006
Develop Intelligence Estimate 10-1-1004	Maintain Communications 10-1-1041	Establish Communications 10-1-1017	Operate the Bulk Petroleum Support Area of Logistics Operations Center 10-1-1022	Maintain Communications 10-1-1041
Develop Personnel Estimate 10-1-1005	Provide Command and Control 10-1-1045	Supervise Establishment of Subordinate Elements and Battalion Headquarters 10-1-1019	Coordinate Internal Logistics 10-1-1025	Provide Command and Control 10-1-1045
Develop Logistics Estimate 10-1-1006	Combat Battlefield Stress 10-1-1303		Operate Tactical Support Area of the Logistics Operations Center 10-1-1037	Operate Base Cluster Operations Center 10-1-01050
Develop Supporting Commander's (Operations) Estimate 10-1-1008	Perform Risk Management Procedures 10-1-1326	Establish Logistics Operations Center and Operational Areas 10-1-1020	Supervise Operations Security Program 10-1-1038	Provide Intelligence Support 10-1-1051
Prepare Operations Plan/Operation Order and Annexes 10-1-1009	Supervise Operations Security Program 10-1-1038	Supervise Operations Security Program 10-1-1038	Supervise Nuclear, Biological, and Chemical Defense Operations 10-1-1040	Direct Response to Threat Actions 10-1-1052
Develop Road Movement Order 10-1-1010	Maintain Communications 10-1-1041	Maintain Communications 10-1-1041		Direct Area Damage Control Operations 10-1-1053

Figure 3-5. Example Petroleum Supply Battalion Mission Outline, Continued.

PETROLEUM SUPPLY BATTALION
MISSION OUTLINE
PROVIDE CLASS III BULK PETROLEUM SUPPORT

FTX
PROVIDE BULK PETROLEUM STORAGE AND DISTRIBUTION SUPPORT TO ASSIGNED AREA
10-1-E0001

STX PLAN CLASS III BULK PETROLEUM SUPPORT 10-1-E0002	STX DIRECT RELOCATION OF BATTALION 10-1-E0003	STX SUPERVISE ESTABLISHMENT OF BATTALION AREA OF OPERATIONS 10-1-E0004	STX DIRECT CLASS III BULK PETROLEUM OPERATIONS 10-1-E0005	STX DIRECT DEFENSE OF ASSIGNED AREA 10-1-E0006
Develop Occupation Plan 10-1-1011	Provide Command and Control 10-1-1045	Provide Command and Control 10-1-1045	Supervise Nuclear, Biological, and Chemical Defense Operations 10-1-1040	Combat Battlefield Stress 10-1-1303
Plan Battalion Area Tactical Operations 10-1-1012	Combat Battlefield Stress 10-1-1303	Combat Battlefield Stress 10-1-1303	Maintain Communications 10-1-1041	Perform Risk Management Procedures 10-1-1326
Plan Rear Operations 10-1-1014	Perform Risk Management Procedures 10-1-1326	Perform Risk Management Procedures 10-1-1326	Provide Personnel Service Support10-1-1042	
Supervise Operations Security Program 10-1-1038			Provide Administrative Support 0-1-1043	
Maintain Communications 10-1-1041			Conduct Command Religious Support Program 10-1-1044	
Provide Command and Control 10-1-1045			Provide Command and Control 10-1-1045	
Combat Battlefield Stress 10-1-1303				

Figure 3-5. Example Petroleum Supply Battalion Mission Outline, Continued.

Appendix D
Sample Chapters 3, 4 and 6 For a Battalion MTP

PETROLEUM SUPPLY BATTALION
MISSION OUTLINE
PROVIDE CLASS III BULK PETROLEUM SUPPORT

FTX
PROVIDE BULK PETROLEUM STORAGE AND DISTRIBUTION SUPPORT TO ASSIGNED AREA
10-1-E0001

STX	STX	STX	STX	STX
PLAN CLASS III BULK PETROLEUM SUPPORT 10-1-E0002	DIRECT RELOCATION OF BATTALION 10-1-E0003	SUPERVISE ESTABLISHMENT OF BATTALION AREA OF OPERATIONS 10-1-E0004	DIRECT CLASS III BULK PETROLEUM OPERATIONS 10-1-E0005	DIRECT DEFENSE OF ASSIGNED AREA 10-1-E0006
Perform Risk Management Procedures 10-1-01326			Provide Intelligence Support 10-1-01051 Combat Battlefield Stress 10-1-01303	

Figure 3-5. Example Petroleum Supply Battalion Mission Outline, Continued.

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Chapter 4

Training Exercises

4-1. General. Training exercises are used to train and practice the performance of collective tasks. This MTP has two types of exercises: FTX and STX. These exercises are designed to assist you in developing, sustaining, and evaluating this unit's mission proficiency. This MTP has one FTX and one STX, Table 4-1.

Exercise Number	Title	Page
FTX 10-1-E0001	Provide Bulk Petroleum Storage and Distribution Support to Assigned Area	4-1
STX 10-1-E0002	Plan Battalion Operations	4-11

Table 4-1. List of Exercises.
(NOTE: Only the FTX is illustrated in this pamphlet.)

4-2. Field Training Exercise. The FTX is designed to provide a training method for the unit to train the critical wartime mission. It provides a logical sequence for the performance of the tasks previously trained in the STXs.

4-3. Situational Training Exercise. The STX is a short, scenario driven, mission oriented tactical exercise used to train a group of closely related collective tasks. The STX provides the information for training the missions that make up the critical wartime mission. The STX does the following functions:

a. Provides repetitive training on the missions.

b. Allows training to focus on identified weaknesses.

c. Allows the unit to practice the missions before the critical wartime mission.

d. Saves time by providing a majority of the information needed to develop a vehicle for training.

QUARTERMASTER BATTALION
(PETROLEUM PIPELINE AND TERMINAL OPERATING)
FTX
PROVIDE BULK PETROLEUM STORAGE AND DISTRIBUTION SUPPORT TO ASSIGNED AREA
10-1-E0001

1. Objective. This sample FTX provides the Quartermaster Battalion (Petroleum Pipeline and Terminal Operating), training in its critical wartime mission, Provide Bulk Petroleum Storage and Distribution Support to Assigned Area.
This sample FTX is used for internal and external evaluations.

2. Interface. This FTX supports the higher headquarters FTX 10-6-E0001, Provide Bulk Petroleum and Potable Water to Assigned Area. The following STXs support this FTX:

a. STX 10-1-E0002, Plan Battalion Operations.

4-1

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Sample Chapters 3, 4 and 6 For a Battalion MTP

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b. STX 10-1-E0003, Direct Relocation of Battalion Elements to a New Operating Site.

c. STX 10-1-E0004, Supervise Establishment of Battalion Area of Operations.

d. STX 10-1-E0005, Direct Bulk Petroleum Support Operations.

e. STX 10-1-E0006, Direct Defense of Assigned Area.

3. Training Enhancers.

a. Chapter 2, Training Matrix, shows the collective tasks that must be mastered to perform the battalion headquarters mission. Training that will improve the battalion headquarters ability to perform its mission are:

(1) Planning, controlling, and coordinating bulk petroleum storage and distribution operations. Training may be conducted in garrison and local training areas by one of the following methods:

(a) Classroom instruction.

(b) MAPEX combined with a sand table exercise.

(c) CPX conducted in garrison.

(d) CFX conducted in a field environment.

(e) TEWT.

(f) COMEX.

(g) Simulations and games.

(2) Establishing an aggressive spirit. An aggressive spirit can be established in a unit and its leaders by engaging in the following activities:

(a) Aggressive unit sports and physical fitness program.

(b) Leader and individual confidence courses.

(c) Appropriate training films that have a positive, aggressive effect on the soldiers.

(d) Awareness of the unit's heritage.

b. This exercise begins with the receipt of a warning order and ends upon the completion of ADC activities. Figure 4-1, illustrates the general scenario of task performance in this exercise. Table 4-2 is a suggested scenario.

4-2

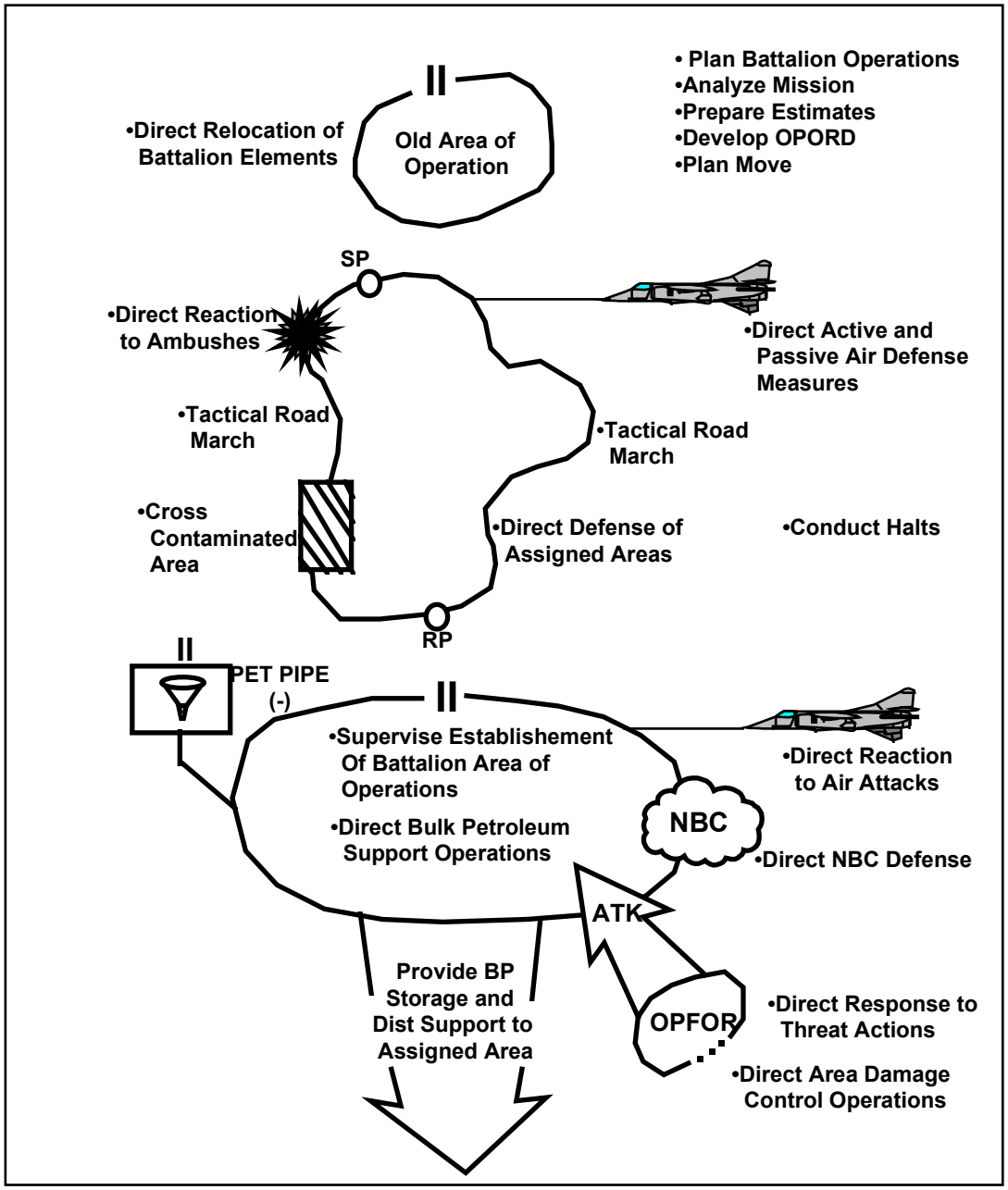

Figure 4-1. General Scenario Illustration.

Appendix D
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Sequence	Event	Estimated Time
1	Administrative Preparations	Pre FTX
2	Receive Warning Order	1 hr.
3	Conduct Mission Analysis	30 min.
4	Receive Restated Mission and Planning Guidance	15 min.
5	Develop Staff Estimates	1 hr.
*6	Provide Logistics and HSS Support Input to Brigade Staff	30 min.
7	Develop Commander's Estimate	55 min.
8	Prepare OPLAN	1 hr.
*9	Develop Road Movement Order	40 min.
10	Develop Occupation, Internal Support, and Defense Plans	1hr 15 min.
11	Intermediate AAR	1 hr.
12	Monitor Movement of Subordinate Elements	6 hrs.
*13	Coordinate Required Assistance During Movement	6 hrs.
14	Verify Closing Reports	1 hr.
15	Intermediate AAR	1 hr.
16	Coordinate Establishment of Assigned Area of Responsibility	4 hrs.
17	Intermediate AAR	1 hr.
18	Support Logistics and HSS Operations in the BSA	36 hrs.
*19	React to NBC Contamination	2 hrs.
*20	Level I Activities	1 hr.
21	Intermediate AAR	1 hr.
22	Threat Level II/III Activities	3 hrs.
23	Intermediate AAR	1 hr
24	Damage Assessments	1hr. 10 min.
25	Conduct Damage Control Operations	3 hrs.
26	Final AAR	3 hrs.

* Indicates time is not added to the total time because tasks are performed simultaneously with other tasks.

NOTES:

- Additional time is required if large portions of the exercise are conducted at night, under limited visibility, or under MOPP conditions.
- Events will be trained to standards, not time limitations. The time required to train an event will vary based on METT-T factors and the proficiency of the unit staff.

Table 4-2. Example Suggested Scenario.

4. General Situation.

a. The Quartermaster Battalion (Petroleum Pipeline and Terminal Operating), is deployed with the Petroleum Group. It is charged with supervising the movement, setup, and defense of the battalion headquarters. The Petroleum Group will conduct new operations in the near future. The Quartermaster Battalion (Petroleum Pipeline and Terminal Operating), must relocate to effectively support the new operation. Appendix B lists a sample Group OPORD that can be used for the exercise.

4-4

b. This exercise is conducted under all environmental conditions during both day and night operations. The battalion headquarters is operating in an arid environment. The battalion headquarters will operate under threat of NBC attacks, attacks by ground or air, indirect fire, and EW.

c. This exercise is conducted under threat of Level I, II, and or III attacks.

d. The battalion headquarters should be prepared to relocate a least every three to four days.

e. The unit should be prepared to move by echelons while continuing to provide support to the assigned area.

5. Special Situation.

a. The battalion commander is conducting a staff meeting. He provides the following guidance to his staff:

"The Group will conduct _____ operations beginning at _____ (date/time). The Group's mission is to _____. The concept of operation is _____. The battalion's mission is to support these operations. We will have to move, and establish the new AO NLT _____(date/time).

b. The battalion commander issues the following instructions:

"Begin your planning process for moving, establishing the new area, coordinating support and defending the battalion headquarters area and CP. This exercise begins with the receipt of a warning order and ends on notification from me. Are there any questions?"

6. Support Requirements.

a. Minimum Trainers and O/Cs. This exercise will be conducted by the battalion commander, who will be the senior internal trainer and O/C. If possible, there should be at least two O/Cs for the unit. At least one other O/C is required with the OPFOR.

b. OPFOR.

(1) OPFOR is required for the exercise to simulate Level II and III threat activities.

(2) OPFOR should have specific missions and be controlled whenever used.

(3) MILES can be used or the trainer and O/C can assess damage to equipment and personnel casualties.

c. Vehicles and Communications. Vehicles and communications equipment organic to the unit are used. Each trainer and O/C needs a vehicle and a radio. Radios are required for OPFOR vehicles during mounted operations.

d. Maneuver Area. Depending upon the local training area, it is desirable to have a training area with a minimum dimensions of 500 x 500 meters. A road network is required that allows a road march of at least 20 kilometers.

e. Consolidated Support Requirements. Battalion support requirements can be calculated by adding the sum total of the requirements for each participating subordinate element.

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Sample Chapters 3, 4 and 6 For a Battalion MTP

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7. T&EO Sequence. Table 4-4 lists the T&EOs used to evaluate the FTX. T&EOs are found in Chapter 5.

TASK	NUMBER	PAGE
Conduct Mission Analysis	10-1-1001	5-5
Conduct Intelligence Preparation of the Battlefield	10-1-1002	5-9
Formulate Feasible Courses of Action	10-1-1003	5-13
Develop Intelligence Estimate	10-1-1004	5-16
Develop Personnel Estimate	10-1-1005	5-21
Develop Logistics Estimate	10-1-1006	5-25
Develop Bulk Petroleum Support Operations Estimate	10-1-0112	5-30
Develop Supporting Commander's Operations Estimate	10-1-1008	5-35
Prepare Operations Plan/Operations Order and Annexes	10-1-1009	5-41
Develop Road Movement Order	10-1-1010	5-46
Develop Occupation Plan	10-1-1011	5-54
Plan Battalion Area Tactical Operations	10-1-1012	5-58
Plan Rear Operations	10-1-1014	5-61
Perform Battalion Advance/Quartering Party Activities	10-1-1015	5-66
Establish Battalion Command Post (Forward)	10-1-1016	5-71
Establish Communications	10-1-1017	5-74
Coordinate Movement of Subordinate Elements	10-1-1018	5-79
Supervise Establishment of Subordinate Elements and Battalion Headquarters	10-1-1019	5-82
Establish Logistics Operations Center and Operations Area	10-1-1020	5-84
Plan Bulk Petroleum Distribution Operations	10-1-0105	5-87
Coordinate Bulk Petroleum Distribution Support	10-1-0107	5-92
Supervise Operations and Maintenance of the Military Petroleum Distribution System	10-1-0106	5-96
Conduct Petroleum Laboratory Operations	10-1-0181	5-99
Coordinate Internal Logistics	10-1-1025	5-102
Operate Tactical Support Area of the Logistics Operations Center	10-1-1037	5-106
Operate the Petroleum Support Area of Logistics Operations Center	10-1-1022	5-110
Supervise Nuclear, Biological, and Chemical Defense Operations	10-1-1040	5-118
Maintain Communications	10-1-1041	5-125
Combat Battlefield Stress	10-1-0303	5-131
Perform Risk Management Procedures	10-1-0326	5-134
Provide Personnel Service Support	10-1-1042	5-137
Provide Administrative Service Support	10-1-1043	5-142
Conduct Command Religious Support Program	10-1-1044	5-147
Provide Command and Control	10-1-1045	5-151
Operate Base Cluster Operations Center	10-1-1050	5-154
Provide Intelligence Support	10-1-1051	5-157
Direct Response to Threat Actions	10-1-1052	5-160
Direct Area Damage Control Operations	10-1-1053	5-164

Table 4-4. T&EOs Used in Evaluating FTX 10-1-E0001.

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Chapter 6

External Evaluation

6-1. General. An external evaluation is conducted to evaluate the battalion's ability to perform its missions. This chapter is a guide for preparing an external evaluation. Using units may modify this evaluation, based on METT-T and other considerations as deemed appropriate by the commander. Selected T&EOs in Chapter 5 are used for evaluation which involves the total unit and employs a realistic OPFOR and the use of MILES. At the end of the evaluation, the commander can identify the strengths and weaknesses of his unit. These strengths and weaknesses are the basis for future training and resource allocations.

6-2. Preparing the evaluation. The commander must standardize evaluation procedures to accurately measure the battalion's capabilities.

a. Preparing the Evaluation Instrument. The sample evaluation scenario in Table 6-1 contains the tasks necessary to develop the scenario and execute the evaluation. Figure 6-1 is a graphic representation of the scenario. Selective tailoring is required, because it is not possible to evaluate every task. The following procedures are suggested for developing the evaluation.

QUARTERMASTER BATTALION (PETROLEUM PIPELINE AND TERMINAL OPERATING) EVALUATION SCENARIO				
SEQUENCE	EVENT	MAXIMUM TIME ALLOTTED		PROPOSED TIME FRAME
1	Admin. preparation	Before start time		
2	Deployment alert notification	30 min.	Day 1	0500
3	Initiate recall plan	30 min.		0530
4	Perform personnel accountability activities	2 hrs.		0730
5	Perform predeployment activities	5 hrs.		1230
6	Intermediate AAR	1 hr.		1330
7	Movement to the port of embarkation	1 hr 30 min.		1500
8	Intermediate AAR	1 hr.		1600
9	Conduct theater reception operations	2 hrs.		1800
10	Perform theater onward activities	2 hrs.		2000
11	Intermediate AAR	1 hr.		2100
13	Warning order received	10 min.	Day 2	0600
14	Analyze mission	30 min.		0630
15	Prepare movement plan	1hr. 45 min.		0815
*16	Prepare occupation plan	40 min.		0855
*17	Provide input to S2/S3	1 hr.		0955
18	Coordinate additional requirements	20 min.		1015
19	Conduct route recon	1 hr.		1115
*20	Prepare vehicles and equipment	55 min		1210
*21	Dismantle current operating site	55 min		1305
22	Organize march elements	20 min		1325

Table 6-1. Example Battalion Evaluation Scenario.

6-1

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Sample Chapters 3, 4 and 6 For a Battalion MTP

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QUARTERMASTER BATTALION (PETROLEUM PIPELINE AND TERMINAL OPERATING) EVALUATION SCENARIO				
SEQUENCE	EVENT	MAXIMUM TIME ALLOTTED		PROPOSED TIME FRAME
23	Brief march unit leaders	15 min.		1340
24	Conduct road march	45 min.		1425
25	Cross contaminated area	45 min.		1510
26	Defend convoy	40 min.		1550
27	Continue road march	45 min.		1635
28	Cross RP	15 min.		1650
29	Intermediate AAR	1 hr.		1750
30	Advance/quartering party activities	1 hr.		1850
31	Occupy new operating site	30 min.		1920
32	Set up defense	1 hr.		2020
*33	Set up TOC	30 min.		2050
34	NBC defense preparations	30 min.		2120
*35	Set up admin. bivouac areas	30 min.		2150
36	Intermediate AAR	1 hr.		2250
37	Provide Class III bulk petroleum support	8 hrs.	Day 3	0600
*38	Air and Level I ground attack	30 min.		0930
*39	Respond to NBC attack	40 min.		1300
*40	Terrorist activities	30 min.		1600
41	Relieved by TCP	40 min.		1640
42	Conduct ADC	2 hrs.		1840
43	Intermediate AAR	1 hr.		1940
44	Redeployment notification	30 min.	Day 4	0600
45	Reinstitution for movement	3 hrs.		0630
46	Movement to redeployment assembly areas	1 hr.		0930
47	Movement to port of embarkation	1 hr.		1030
48	Reception activities of debarkation	2 hrs.		1130
49	Move to final AAR site and conduct AAR	3 hrs.		1330
		Total Time 79 hrs. 30 min.		
* Events occur simultaneously				

Table 6-1. Example Battalion Evaluation Scenario, Continued.

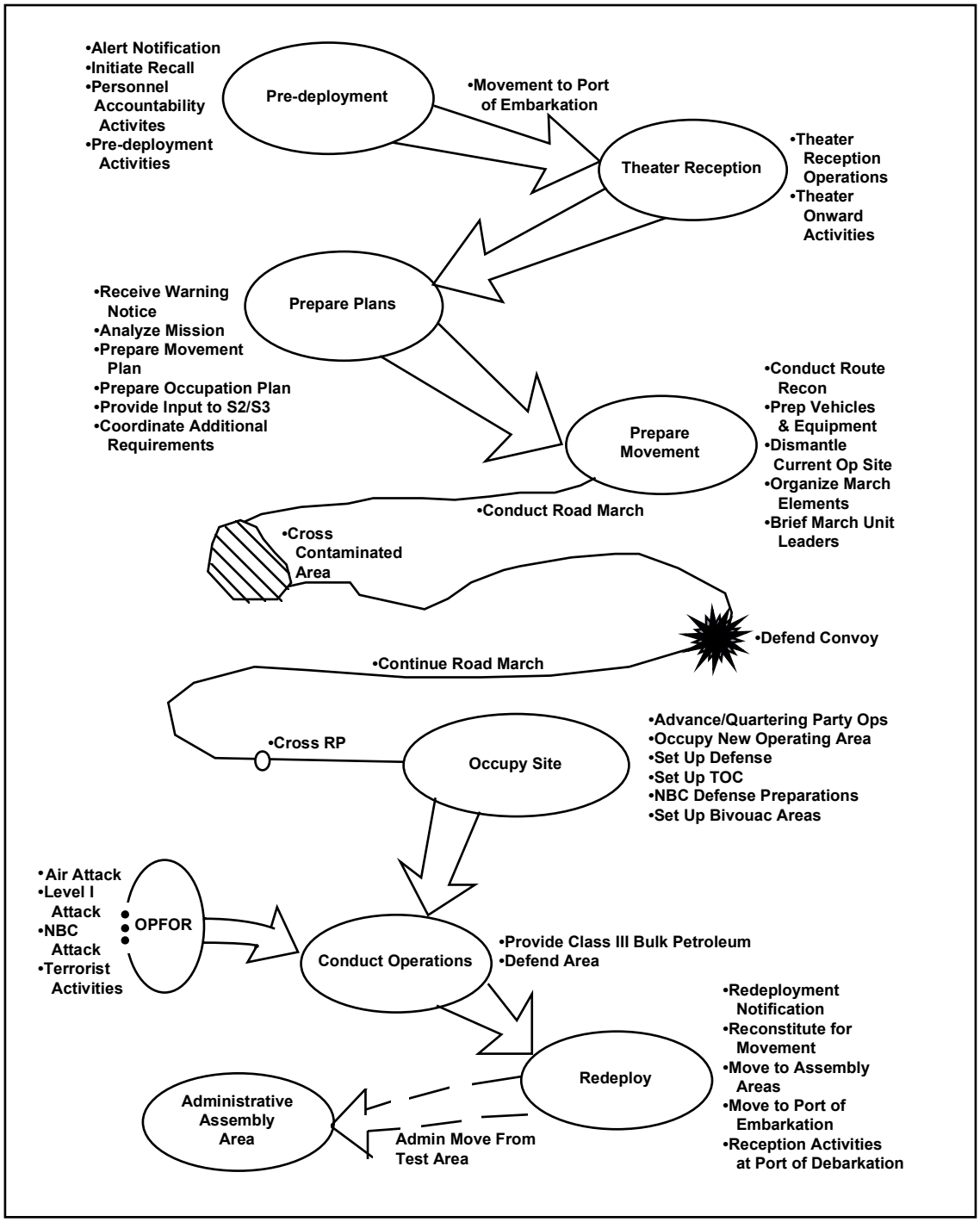

Figure 6-1. Example Graphic Scenario.

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(1) Identify the missions for evaluating each echelon or element, using Table 2-1. Record the selected missions in the UPW, Figure 6-2.

Unit:______________________________ Date:______________

No.	Unit Mission/Task	______ Section/ Squad	______ Section/ Squad	______ Section/ Squad	______ Section/ Squad	Unit Overall Rating & Remarks
		GO NO-GO	GO NO-GO	GO NO-GO	GO NO-GO	
		GO NO-GO	GO NO-GO	GO NO-GO	GO NO-GO	
		GO NO-GO	GO NO-GO	GO NO-GO	GO NO-GO	
		GO NO-GO	GO NO-GO	GO NO-GO	GO NO-GO	
		GO NO-GO	GO NO-GO	GO NO-GO	GO NO-GO	
		GO NO-GO	GO NO-GO	GO NO-GO	GO NO-GO	
		GO NO-GO	GO NO-GO	GO NO-GO	GO NO-GO	
		GO NO-GO	GO NO-GO	GO NO-GO	GO NO-GO	
		GO NO-GO	GO NO-GO	GO NO-GO	GO NO-GO	
		GO NO-GO	GO NO-GO	GO NO-GO	GO NO-GO	
		GO NO-GO	GO NO-GO	GO NO-GO	GO NO-GO	
		GO NO-GO	GO NO-GO	GO NO-GO	GO NO-GO	

* If more space is required for remarks use the back side of this form

Figure 6-2. Example Battalion Unit Proficiency Worksheet.

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(2) List each mission on a Task Summary Sheet, Figure 6-3.

TASK SUMMARY SHEET

MISSION:

TASK TITLES	T&EO NUMBER	EVALUATION	
		GO	NO GO

Observer Controller's Signature:_____

NOTE: A separate task summary sheet will be prepared for each mission evaluated. Observer Controller's comments may be placed on an enclosure to the task summary sheet.

Figure 6-3. Example Battalion Task Summary Sheet.

(3) Select the tasks for the evaluation of every mission. List the selected tasks on the Task Summary Sheets which are used for recording the results of the evaluation.

(4) Compile the selected missions and tasks in the order they logically occur in the detailed scenario. Group the selected missions and tasks in parts for continuous operations, Table 6-1, Sample Evaluation Scenario. Parts can be interrupted at logical points to assess MILES casualties and conduct in-process AARs.

Appendix D
Sample Chapters 3, 4 and 6 For a Battalion MTP

ARTEP 10-***-MTP

6-3. Resource requirements and planning considerations. Adequate training ammunition, equipment, and supplies must be forecasted and requisitioned. Table 6-2 is a consolidated list of support requirements for this evaluation. It is based on experience with the scenario in Table 6-1. The evaluating headquarters will prepare its own consolidated support requirements.

CONSOLIDATED SUPPORT REQUIREMENTS

AMMUNITION	QUANTITY
5.56-mm (blank)	134 rounds/man
7.62-mm (blank)	400/M60 machine guns
Caliber .50 (blank)	200 rounds per M2 machine gun
Hand grenade (practice)	2 per Soldier
Hand grenade fuse (practice)	2 per Soldier
ATWESS cartridges	4 per Viper/LAW
Simulator, Artillery	8 per Co./10 OPFOR
Simulator, Booby Trap	6 per Co./3 OPFOR

OTHER ITEMS	QUANTITY
Diesel and MOGAS	Use FM 101-1/2 to calculate requirements
Batteries - BA 200 (6-volt)	48 ea.
Batteries - BA 3090 (9-volt)	560 ea.
Chemlight	4 box per Co.
War Wound Moulage Kit	1 ea.

MILES EQUIPMENT	COMPANY	EVALUATORS	OPFOR
Caliber .50 system	2		2
M16 systems	32		20
M60 machine gun systems	2		2
Controller guns		5	
Small-arms alignment fixture		1	
Viper	3		2

Table 6-2. Example Consolidated Support Requirements.

6-4. Selecting and training O/Cs. A successful evaluation depends heavily on selecting O/Cs with the proper experience, training them to fulfill their responsibilities and supervising them throughout the conduct of the evaluation.

a. A six-person O/C team comprised of the following personnel is suggested for performing an external evaluation of the battalion.

(1) Senior O/C.

(2) Staff O/C.

(3) Operations O/C.

(4) Administration O/C.

(5) Logistics O/C.

(6) NBC O/C.

b. O/Cs are required to be thoroughly familiar with the battalion's mission, organization, equipment, and doctrine. They must understand the overall operation of the battalion and how it is integrated into and supports Force Projection Operations. Team members must have a working knowledge of the common individual and collective tasks in areas such as local defense, convoy procedures, communications, and NBC. One member of the team must have detailed expertise in the NBC and local defense common task areas. O/Cs should be equal in grade to the person in charge of the element they are evaluating. O/Cs should have previous experience in the position being evaluated. All team members must be able to make objective evaluations, function effectively as team members, and state their findings in writing and briefings.

c. O/C training focuses on providing observer controllers a general understanding of the overall evaluation, providing each O/Ca detailed understanding of specific duties and responsibilities and on building a spirit of teamwork. O/C training includes:

(1) The overall evaluation design, general scenario, master events list and specific evaluation purposes and objectives.

(2) The battalion METL and its linkage to the T&EOs and other materials contained in this ARTEP MTP.

(3) The O/C team composition and general duties and responsibilities of each team member.

(4) Detailed responsibilities of individual team members with special emphasis on the master events list items that are their responsibility.

(5) A review of the written instructions and materials contained in the O/Cs folders.

(6) A detailed reconnaissance of the area used for the evaluation.

(7) The O/C communications and command and control system.

(8) Safety procedures.

(9) Evaluation data collection plan and procedures.

(10) AAR procedures and techniques.

(11) A talk-through of the entire evaluation which includes wargaming all items of the master events list in order of their occurrence and a review of each team member's responsibilities and anticipated problems.

d. The senior O/C supervises the operation of the team. He provides the team leadership and focuses his efforts on ensuring O/Cs fulfill their responsibilities and adhere to the evaluation plan. He answers questions concerning the evaluation plan, resolves problems, synchronizes the efforts of team members, ensures close coordination among team members, holds periodic team coordination meetings, plans and orchestrates the battalion AAR and conducts specific evaluation team AARs.

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Sample Chapters 3, 4 and 6 For a Battalion MTP

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6-5. Selecting and training OPFOR. The OPFOR support for an external evaluation of the battalion is limited to two squads of dismounted infantry and two to five individuals who serve as enemy agents. Although OPFOR support is only used for some tasks, proper training and employment of this force is important to ensure a proper assessment of the battalion's capabilities.

a. The OPFOR commander should be a company grade officer or senior NCO who is well trained in OPFOR tactics and operations. In addition to this duties and responsibilities in leading various OPFOR elements, the OPFOR commander serves as a part-time member of the O/C team. In order to fulfill O/C responsibilities, the OPFOR commander must participate in O/C planning and training activities. He must be present during AARs.

b. OPFOR elements are trained, organized and equipped to operate in a manner that depicts threat forces as realistically as possible. Their training includes:

(1) Threat tactics and rules for engagement.

(2) OPFOR missions and responsibilities.

(3) OPFOR tasks and standards.

(4) Threat weapons and equipment, if available.

(5) Command and control.

(6) Safety.

6-6. Conducting the evaluation. The senior O/C has overall responsibility for the conduct of the evaluation. He orchestrates the overall evaluation and the support provided by the various individuals and elements which are specially selected and trained to fulfill designated functions and responsibilities.

a. O/Cs must be free to observe, report, and record the actions of the battalion.

b. The headquarters two echelons above the battalion being evaluated should select and train the control element for the evaluation. They issue orders, receive reports, provide feeder information and control the OPFOR.

c. All exercise participants and supporting personnel must ensure that every facet of the evaluation is conducted in a safe manner. Personnel observing unsafe conditions must take prompt action to halt them and advise their superiors of the situation.

6-7. Recording external evaluation information.

a. The senior O/C has overall responsibility for the implementation of the evaluation scoring system. Although the final evaluation is made up by the senior O/C, the full team participates in this process. Their reports reflect the overall ability of the petroleum supply battalion to accomplish its wartime missions.

b The evaluation scoring system is based on an evaluation of the units performance of each mission essential task and any other collective task contained in the overall evaluation plan. This evaluation has four steps.

(1) Identify the ARTEP MTP T&EOs which correspond to each of the evaluation plan tasks.

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(2) Use T&EO standards to evaluate the unit's performance of the tasks. This is done for each evaluation plan task.

(3) Record on the T&EO a GO for each performance measure performed to standard and a NO-GO for each performance measure not performed to standard.

(4) Record the unit's overall capability to perform the task by using GO/NO-GO information recorded on each T&EO. Use the following definitions as guidance in making this determination.

(a) GO - the unit successfully accomplished the task or performance measure to standards.

(b) NO-GO - the unit did not accomplish the task or performance measure to standard.

c. Other locally designed reports approved by the senior O/C and prescribed in the evaluation plan may be used to collect evaluation information. These reports assist the team in recording the information concerning the unit's capability to perform its wartime mission in accordance with the established standards. This information will assist the senior O/C to determine the unit's overall final rating. These reports may include:

(1) Unit Data Sheet (Figure 6-4). This report records personnel and equipment status information.

(2) Environmental Data Sheet (Figure 6-5). This report records information concerning weather and terrain conditions present during the evaluation period.

(3) Personnel and Equipment Loss Report (Figure 6-6). This report records information concerning battalion personnel and equipment losses during OPFOR engagements.

6-8. After action reviews. AARs provide direct feedback to battalion headquarters members by involving them in the training diagnosis process and by enabling them to discover for themselves what happened during the evaluation. In this way, participants identify errors and seek solutions which increase the value of the training and reinforce learning.

a. The senior O/C is responsible for the AAR process. He coordinates the entire AAR program from the initial planning of the evaluation through the after actions phases.

b. Key steps in the AAR process are:

(1) AAR planning. Planning for AARs is initiated in the exercise preparation activities long before the start of the action evaluation. AARs are integrated into the general scenario at logical break points and into the detailed evaluation scenario which is developed subsequently. Qualified O/Cs are selected and trained in the AAR processes as part of O/C training. This phase also includes the identification of potential AAR sites and the requisition of equipment and supplies needed to conduct the AAR.

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Sample Chapters 3, 4 and 6 For a Battalion MTP

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UNIT DATA SHEET						
1. UNIT DESIGNATION:				DATE:		
2. UNIT LEADERS (CIRCLE MOST CORRECT ANSWER)						
POSITION	RANK	TIME IN UNIT (MONTHS)				
COMMANDER	LTC / MAJ	1-3	4-6	7-12	13-18	≥19
BN XO	MAJ / CPT	1-3	4-6	7-12	13-18	≥19
BN S3	MAJ / CPT	1-3	4-6	7-12	13-18	≥19
BN S1	CPT / 1LT	1-3	4-6	7-12	13-18	≥19
BN S2	CPT / 1LT	1-3	4-6	7-12	13-18	≥19
BN S4	CPT / 1LT	1-3	4-6	7-12	13-18	≥19
FSO	CPT / 1LT	1-3	4-6	7-12	13-18	≥19
BN MAINT OFFICER	CPT / 1LT	1-3	4-6	7-12	13-18	≥19
A COMPANY CDR	CPT / 1LT	1-3	4-6	7-12	13-18	≥19
B COMPANY CDR	CPT / 1LT	1-3	4-6	7-12	13-18	≥19
C COMPANY CDR	CPT / 1LT	1-3	4-6	7-12	13-18	≥19
3. UNIT STRENGTH (excluding leaders):						
4. EQUIPMENT SHORTAGES (Major items):						
5. COMMENTS:						
OBSERVER CONTROLLERS SIGNATURE:						

Figure 6-4. Example Battalion Level Unit Data Sheet.

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ENVIRONMENTAL DATA SHEET
EXERCISE NUMBER AND DESCRIPTION:
DATE/TIME EXERCISE STARTED:
DATE/TIME EXERCISE ENDED:
1. WEATHER CONDITIONS: (Circle appropriate description) Clear Partly Cloudy Cloudy Hazy Rain Snow Fog Other: Temperature:
2. GROUND CONDITIONS: (Circle appropriate description) Dry Wet Ice Snow Other:
3. LIGHT CONDITIONS: (Circle appropriate description) Day Night Moon Phase: None 1/4 1/2 3/4 Full Average Range of Visibility Due to Light:
4. TERRAIN: (Circle appropriate description) Flat Rolling Mountainous Jungle Desert Urban Arctic Other: Top Soil: Sandy Rocky Clay Other: Average Range of Visibility Due to Terrain:
5. REMARKS:

Figure 6-5. Example Environmental Data Sheet.

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Appendix D
Sample Chapters 3, 4 and 6 For a Battalion MTP

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PERSONNEL AND EQUIPMENT LOSS REPORT					
Mission Title or Task Number	Date/Time of Enemy Contact	Friendly KIA/WIA	Enemy KIA/WIA	Friendly Vehicles Destroyed	Enemy Vehicles Destroyed
COMMENTS:					

Figure 6-6. Example Personnel And Equipment Loss Report.

(2) AAR preparation. AAR preparation commences with the beginning of the actual evaluation. In addition to observing the headquarters petroleum supply battalion performing its critical tasks, this phase includes the review of training objectives, orders, and doctrine. Final AAR site selection is completed and times and attendance are established. AAR information is gathered from applicable O/Cs and battalion personnel. The AAR is organized and rehearsed.

(3) AAR conduct. AARs are conducted at logical break points in the exercise and at the end of the evaluation. When AAR participants have assembled, the AAR begins with the senior O/C introducing the session with a statement of the AAR purpose, the establishment of the AAR ground rules and procedures, and a restatement of the training and evaluation objectives. Guidelines for a successful AAR include:

(a) AARs are not critiques, but professional discussions of training events.

(b) The senior O/C guides the discussion in a manner that ensures lessons are openly discussed by the participants.

(c) Dialogue is encouraged among O/Cs and battalion personnel.

(d) All individuals who participated in the evaluation are present for the AAR, if possible. As a minimum, every unit or element that participated in the exercise is represented.

(e) Participants discuss not only what happened, but also how it happened and how it could have been done better.

(f) Participants review the sequence of the events associated with the hazards and the risk assessment made prior to the exercise. As a minimum the review should address hazards that presented themselves that were not identified, and each incident of fratricide or near fratricide and how it could be avoided in the future.

(g) Events which were not directly related to the major events are not examined.

(h) Participants do not offer self serving excuses for inappropriate actions.

(i) The AAR end result is that soldiers and leaders through discovery learning gain a better understanding of their individual and collective strengths and weaknesses and become more proficient in training for and performing their critical tasks.

Appendix E
Summary Job Aid: Guide for Producing MTPs

How to Use

This job aid identifies the nine procedures you follow to produce an MTP. Each procedure lists steps and a page within the "Summary Job Aid: Guide for Producing MTPs." Refer to the page for additional information.

Procedures

Here is a list of the nine procedures:

1. Research documentation/informational sources for preparing: T&EOs, training exercises, mission outlines, and collective training matrixes.
2. Determine if the MTP will be the publication medium for the drills.
3. Prepare a T&EO for each collective task.
4. Prepare mission outlines.
5. Prepare training exercises to support mission training requirements.
6. Prepare collective training matrixes.
7. Prepare a draft of the MTP.
8. Prepare CRC.
9. Maintain the MTP production documentation.

Procedure 1 Research Documentation

Follow these steps to research documentation/information sources for preparing T&EOs, training exercises, mission outlines, and training matrixes.

Step	Action
1	Obtain mission and collective analysis documentation and informational sources, to include: •Mission analysis products. •Collective task analysis products •Appropriate Army Publications
2	Review the mission and collective analysis documentation and informational sources. •Scan the information to get an idea of the kind of information it includes. •Decide if the information is applicable.
3	Gather applicable information, documents or products. •Read applicable information carefully. •Make notes on the information. •Select documents/products to use.

Procedure 2: Determine Drill Publication Medium

Follow these steps to determine if the MTP will be the publication medium for the drills.

Step	Action
1	Determine the number of drills to be developed. •Examine the drill candidate list. •Identify the number of drills to be developed and the number of procedures involved to perform the drill.

Continued on next page

Procedure 2: Determine Drill Publication Medium (Continued.)

Step	Action
2	Decide if the number of drills justifies including the drills as an appendix to the MTP.
3	Submit a recommendation for approval to the school commandant for the MTP to be used as the publication medium for drills.

Procedure 3: Prepare T&EOs Follow these steps to prepare a T&EO for each critical collective task.

Step	Action
1	Review information for writing the T&EOs. •Examine the Task Performance Specifications for the T&EO being prepared. •Examine pertinent references needed to perform the task, if needed. •Number the T&EO.
2	Write the T&EOs. •Select a task. •Format a T&EO for the selected task. •Transfer data from the Task Performance Specifications under the appropriate topic heading. •Enter the supporting individual tasks under SUPPORTING INDIVIDUAL TASKS. •Determine if OPFOR tasks are appropriate. •Prepare OPFOR tasks and standards. •Enter OPFOR task(s), conditions(s), and standard(s) under OPFOR TASKS AND STANDARDS, if needed.
3	Identify common collective tasks for T&EOs.

Procedure 4: Prepare Training Exercises Follow these steps to prepare training exercises.

Step	Action
1	Determine the types of exercises to develop. •Verify the target audience the MTP is being developed for. •Select tasks to include in training exercises. •Group the tasks into candidate training exercises, by missions. •Select a training exercise strategy for each task grouping.

Continued on next page

Appendix E
Summary Job Aid: Guide for Producing MTPs, Continued

Procedure 4: Prepare Training Exercises (Continued.)

Step	Action
2	Design STXs. •Verify the collective tasks that make up the candidate STX. •Determine if any candidate STXs can combine into one. •Determine resource requirements to support the STX. •Identify threat information to integrate into the STX. •Identify if opposing forces are applicable. •Develop a general scenario. •Design sample FRAGO. •Determine training objectives. •Outline the STXs.
3	Design FTXs. •Determine if the FTX can be executed as part of the parent MTP. •Determine resource requirements to support the FTX. •Determine related subordinate training requirements and other information. •Design sample operation orders. •Develop a general scenario for each mission outline. •Determine training objectives. •Outline the FTXs.
4	Design CPXs, CFXs, and LFXs. •Review the collective tasks. •Review the parent and proponent units' FTXs/STXs. •Design sample operation orders. •Develop a general scenario for each mission outline. •Design graphics and illustrations. •Determine training objectives. •Outline the CPXs, CFXs, and LFXs
5	Develop the training exercises. •Select an exercise to write. •Format a layout of the exercise. •Write the heading. •Write the objectives. •Write an interface paragraph. •Write the training section. •Write the supporting requirements. •Compile a list of the T&EOs addressed in the exercise.
6	Obtain approval for the training exercises, if required.

Procedure 5: Prepare Mission Outlines

Follow these steps to prepare mission outlines.

Step	Action
1	Determine the missions to be developed into mission outlines. •Verify the unit the MTP is being developed for. •Verify the mission performed by that unit. •Verify those missions which are critical. •Compile a list of critical missions. •Prioritize the missions. •Select missions to fully develop for the MTP.
2	Determine the components of each mission outline. •Select one of the missions to develop an outline for. •Develop a list of candidate STXs designed to support training for the unit's critical wartime mission. •Confirm the selected STXs combine into a coherent group for training.
3	Construct the mission outlines in a graphic format. •Select a critical mission for which to construct an outline. •Review the mission outline format. •Determine the heading of the mission outline. •Write the heading. •List the STXs as column headings. •List for each STX, the collective tasks and drills inherent in each.

Procedure 6: Prepare Training Matrixes

Follow these steps to prepare collective training matrixes.

Step	Action
1	Determine matrixes to prepare. •Review guidelines in TRADOC Reg 350-70. •Verify echelon level of MTP being developed. •Verify that the unit has two or more missions. •Identify the required matrixes for that unit's MTP. •Identify optional matrixes to include in the MTP. •List matrixes to prepare.

Continued on next page

Appendix E
Summary Job Aid: Guide for Producing MTPs, Continued

Procedure 6: Prepare Training Matrixes (Continued.)

Step	Action
2	Construct the matrixes. •Select a matrix to construct. •Compile information for the matrix. •Draft the matrix. •Cross-reference the draft matrix with the T&EOs. •Finalize the matrix in the proper format.

Procedure 7: Prepare Draft Follow these steps to prepare an initial draft of the MTP.

Step	Action
1	Number the MTP. •Assign the publication medium "ARTEP". •Identify the proponent school number. •Assign the proponent identification number to the first two digits. •Assign the TOE number to the next three digits. •Assign an echelon subnumber if the organization is smaller than those identified by the TOE number. •Assign the designator "MTP" after the last number.
2	Write the chapters. •Verify the boilerplate information contained in the MTP shell. •Outline the content for Chapters 1 through 6. •Develop the outline into chapters with topic sentences and paragraphs. •Cross reference the outline with the chapters.
3	Construct the initial graphics. •Determine the graphics requirements. •Develop the graphic (tables, charts, diagrams, illustrations). •Edit the graphics. •Establish the placement of the graphics within the text.
4	Assemble the draft. •Sequence the chapters per the MTP format. •Write the front and back matter.
5	Type the draft.
6	Edit the draft for: •Content. •Grammar, punctuation, and spelling. •Clarity. •Internal references.

Continued on next page

Procedure 7: Prepare Draft (Continued.)

Step	Action
7	Validate the draft. •Develop a validation plan. •Prepare for conducting the validation. •Conduct the validation. •Prepare a report on results of the validation. •Revise the MTP, as necessary.
8	Prepare the draft for printing. •Make a copy of the draft. •Prepare a print request for the draft. •Forward the print request and copy of the draft to the print plant.
9	Staff the draft. •Prepare a transmittal memorandum. •Route the memorandum and enclosure for signature. •Pack the draft and transmittal memorandum. •Route the package per distribution guidelines.
10	Revise the draft. •Review the staffing comments. •Identify appropriate recommendations and comments. •Identify comments not appropriate for inclusion. •Make appropriate changes. •Write a justification for not incorporating a recommendation or comment. •Verify modification identified during validation were completed. •Revise the graphics, if needed.

Procedure 8: Prepare a CRC Follow these steps to prepare a final draft of the MTP.

Step	Action
1	Construct the CRC.
2	Edit the CRC.
3	Coordinate the review of the CRC. •Submit the CRC to the major support command for review. •Submit the CRC to the appropriate board (DRAG or IPR), for additional review.

Continued on next page

Appendix E
Summary Job Aid: Guide for Producing MTPs, Continued

Procedure 8: Prepare a CRC (Continued.)

Step	Action
4	Prepare the CRC for publication. •Revise the CRC, if necessary. •Prepare the final graphics. •Edit the CRC. •Obtain permission to use copyrighted information, if needed. •Submit the CRC to the school commandant for approval. •Submit the CRC to ATSC for publication.

Procedure 9: Maintain Production Documentation Follow these steps to maintain the MTP production documentation.

Step	Action
1	Obtain the documents to be maintained. •Matrixes and T&EOs. •DRAG/IPR proceedings, MSC review/command approval documents. •Comments from the field staffing. •Initial draft, final draft, and CRC. •Validation instruments and results. •Validation reports. •Current ARTEP MTP. •Approval documents.
2	Label the documents.
3	File the documents throughout the production process per Army procedures.

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Appendix F
Summary Job Aid: Guide for Producing Drill Books

How to Use

This job aid identifies the five procedures you follow to produce a drill book. Each procedure lists steps and a page within the "Guide for Producing Collective Training Documents." Refer to the page for additional information.

Procedures

Here is a list of the five procedures:

1. Prepare the drills.
2. Prepare the individual critical task-to-drill matrix.
3. Prepare a draft of the drill book.
4. Prepare a CRC of the drill book.
5. Maintain the drills/drill book production documentation.

Procedure 1: Prepare Drills

Follow these steps to prepare the drills.

Step	Action
1	Examine the drill candidate tasks. •Verify the drill candidate task. •Verify that the task standard is observable and measurable. •Verify the leader and individual tasks that will make up the drill task.
2	Determine the type of drill to develop for each task. •Verify the echelon level of the candidate task for drill development. •Review the leader tasks individual tasks that make up the drill. •Identify the type of drill to develop.
3	Verify the appropriate cue(s) for each drill.
4	Develop drill instructions. •Prepare the setup instructions. •Prepare the talk-through instructions. •Prepare the walk-through instructions. •Prepare the run-through instructions.
5	Develop supporting illustrations. •Determine the visual aid requirements. •Develop a rough draft of the graphics.

Continued on next page

Procedure 1: Prepare Drills (Continued.)

Step	Action
6	Write the drills. •Select a drill to write. •Format a battle or crew layout for the drill. •Transfer data from the task specifications worksheet under the appropriate topic headings: ▪Enter the task statement. ▪Enter the condition statement. ▪Enter the standard(s) statement. ▪List the performance measures. •Enter a statement about supporting tasks under SUPPORTING INDIVIDUAL TASKS. •If you are writing a battle drill, enter a statement about illustrations under ILLUSTRATIONS. •Transfer drill instructions into drill format. •Enter additional leader instructions under COACHING POINTS. •Incorporate drill illustrations.
7	Validate the drills. •Select a drill to validate. •Develop a validation plan. •Prepare for conducting the validation. •Conduct the validation. •Prepare an after action review. •Revise the drill, as necessary.
8	Number the drills. •Select a drill to number. •Identify the proponent school number using Appendix G. •Assign the proponent identification number to the first two digits. •Assign the echelon identification number to the third digit. •Assign the task identification number to the last three digits. (Note: Task ID No. will begin with a "D.")

Procedure 2: Prepare Individual Task-to-Drill Matrix Follow these procedures to prepare an individual critical task-to-drill matrix.

Step	Action
1	Verify the drills developed.
2	Verify the individual tasks that make up each drill.
3	Identify the individual tasks to be trained before each drill can be performed.
4	Identify the individual tasks to be trained during each drill.

Continued on next page

Appendix F
Summary Job Aid: Guide for Producing Drill Books, Continued

Procedure 2: Prepare Individual Task-to-Drill Matrix (Continued.)

Step	Action
5	Construct a matrix to show the training requirements of the individual tasks in relation to each drill. •Draft the matrix. •Cross reference the draft matrix with the T&EOs to ensure no individual tasks have been inadvertently excluded. •Finalize the matrix in the proper format.

Procedure 3: Prepare Draft Follow these steps to prepare the initial draft of the drill book.

Step	Action
1	Number the drill book. •Assign the publication medium "ARTEP." •Identify the proponent school number. •Assign the proponent identification number to the first two digits. •Assign the TOE number to the next three digits. •Assign an echelon identifier if the organization is smaller than those identified by the TOE number. •Assign the designator "Drill" after the last number.
2	Write the chapters. •Verify the boilerplate information contained in the drill book shell. •Outline the content for Chapters 1 and 2. •Develop the outline into chapters with topic sentences and paragraphs. •Cross reference the outline with the chapters.
3	Prepare the graphics. •Determine the graphics requirements. •Develop the graphics (tables, charts, diagrams, illustrations, and so on). •Edit the graphics. •Establish the placement of the graphics within the text.
4	Assemble the draft. •Sequence the chapters per the drill book format. •Write the front and back matter.
5	Type the draft.

Continued on next page

Procedure 3: (Continued).
Prepare draft

Step	Action
6	Edit the draft for: •Content. •Grammar, punctuation, and spelling. •Clarity. •Internal references.
7	Validate the draft. •Develop a validation plan. •Prepare to conduct the validation. •Conduct the validation. •Prepare a report of the validation. •Revise the drill book, as necessary.
8	Prepare the draft for printing. •Make a copy of the draft. •Prepare a print request for the draft. •Forward the print request and copy of the draft to the print plant.
9	Staff the draft. •Prepare a transmittal memorandum. •Route the memorandum and enclosure for signature. •Pack the draft and transmittal memorandum. •Route the package IAW distribution guidelines.
10	Revise the draft. •Review the staffing comments. •Identify appropriate recommendations or comments. •Identify comments not appropriate for inclusion. •Make the appropriate changes. •Write a justification for not incorporating a recommendation or comment. •Verify modifications identified during validation were completed. •Revise the graphics, if necessary.

Procedure 4: Follow these steps to prepare a final draft of the drill book.
Prepare CRC

Step	Action
1	Construct the CRC.
2	Edit the CRC.
3	Coordinate the review of the CRC. •Submit the CRC to the MSC for review. •Submit the CRC to the appropriate board (DRAG or IPR), for additional review.

Continued on next page

Appendix F
Summary Job Aid: Guide for Producing Drill Books, Continued

Procedure 4: Prepare CRC (Continued.)

Step	Action
4	Prepare the CRC for publication. •Revise the CRC, if necessary. •Prepare the final graphics. •Edit the CRC. •Obtain permission to use copyrighted information if necessary. •Prepare the CRC for reproduction. •Submit the CRC to the school commandant for approval. •Submit the CRC to ATSC for publication.

Procedure 5: Maintain Publication Documentation Follow these steps to maintain the MTP production documentation.

Step	Action
1	Obtain the documents to be maintained. •Individual critical task-to-drill matrix. •Original drills. •Comments from the internal and field staffing. •Initial draft and CRC. •Validation instruments and results. •Validation reports. •IPR or DRAG proceedings and command approval documents. •Current drill book.
2	Label the documents.
3	File the documents throughout the production process IAW Army procedures.

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Appendix G
Proponent Identification Numbers

01	Aviation
03	Chemical
05	Engineer
06	Field Artillery
07	Infantry
08	AMEDDC&S
09	Ordnance (Missile and Munitions)
10	Quartermaster
11	Signal
12	Adjutant General
14	Finance
16	Chaplain
17	Armor
18	Management Information Systems
19	Military Police
20	General
21	Individual Soldier
22	Leadership, Courtesy and Drill
23	Weapons (including accessories and ammunition)
24	Communications Techniques
25	General Management
26	Organizational Effectiveness
27	Military Law
29	Composite Units and Activities
30	Military Intelligence
31	Special Operating Forces
32	Security
33	Psychological Operations
34	Combat Electronic Warfare and Intelligence
36	Environmental Operations
37	Mechanized Units
38	Logistics Management
39	Special Weapons
41	Civil Affairs
42	Supply
43	Maintenance (except Missiles)
44	Air Defense Artillery
45	Censorship
46	Public Information
50	Common Items of Nonexpendable Materiel
51	Army
52	Corps
54	Logistical Organizations and Operations
55	Transportation
57	Airborne
60	Explosive Ordnance Disposal Procedures

63	Combat Service Support
67	Airmobile
70	Research, Development, and Acquisition
71	Combined Arms
74	Military Missions
75	Military Advisory Groups
77	Light Infantry Division
80	Special Operations
87	Heavy Division/Brigade
90	Combat Operations
95	Air Traffic Control
97	Division (Training)
100	General Operational Doctrine
101	Staff Officers
105	Maneuver Control
145	Reserve Officers Training Corps
300	TCE Consolidated Change Tables

Note: For further information on proponency see AR 25-30, The Army Integrated Publishing and Printing Program.

Appendix H
Sample Contractor Statement of Work

COMBINED ARMS SUPPORT COMMAND
CONCEPTS AND DOCTRINE DIRECTORATE
LOGISTICS DOCTRINE DIVISION
ARTEP BRANCH (ATTN: ATCL-CLA)
FT LEE, VIRGINIA 23801

TECHNICAL COORDINATOR: NAME
DSN XXX-XXXX
COMM (XXX) XXX-XXXX

DATE OF SUBMISSION: DATE

STATEMENT OF WORK-STATEMENT OF WORK FOR ARTEP MTPS

COPIES OF DELIVERABLES TO BE SENT TO:

NAME AND MAILING ADDRESS	NUMBER OF COPIES
COMMANDER U.S. ARMY CASCOM ATTN: ATCL-CLA FOR LEE, VA 23801-6000	5 OF EACH CD 1 OF EACH CRC
COMMANDANT U.S. ARMY ORDNANCE CENTER AND SCHOOL ATTN: ATSL-DTD-IUC ABERDEEN PROVING GROUND, MD 21005-5036	1 MASTER AND 53 OF EACH CD 2 OF EACH CRC
COMMANDANT ACADEMY OF HEALTH SCIENCE, USA ATTN: HSHA-TTC FORT SAM HOUSTON, TX 78234-6100	1 MASTER AND 53 OF EACH CD 2 OF EACH CRC
COMMANDANT U.S. ARMY TRANSPORTATION SCHOOL ATTN: ATSP-TDU FORT EUSTIS, VA 23604-5427	1 MASTER AND 53 OF EACH CD 2 OF EACH CRC
COR HQ, TRADOC FORT MONROE, VA 23651-5000	1 OF EACH CD 1 OF EACH CRC
CONTRACTING OFFICER, TCA FORT EUSTIS, VA 23604	1 OF EACH CD 1 OF EACH CRC

Appendix H
Sample Contractor Statement of Work, Continued

STATEMENT OF WORK--STATEMENT OF WORK
FOR
DEVELOPMENT OF ARMY TRAINING AND EVALUATION PROGRAM (ARTEP)
MISSION TRAINING PLANS (MTP)

1.0 Applicable Contract Specification Paragraph. C-4. Tasks 2 and 4. The contractor will develop a Statement of Work Performance Plan/Front-End Analysis/MTP Development Plan for nine MTPs. The contractor will develop a coordinating draft for field review, a final draft, and a camera-ready copy for each MTP.

2.0 General Scope of Work. This Statement of Work covers the development of five camera-ready ARTEP MTPs for the U.S. Army Transportation School; three camera-ready ARTEP MTPs for the U.S. Army Academy of Health Sciences; and one camera-ready ARTEP MTP for the U.S. Army Ordnance Center and School. This project is to be completed within 24 months after the start of the project.

3.0 Government Furnished Data. See Enclosure 1.

4.0 Contractor Tasks, Standards of Performance and Deliverables.

4.1 The contractor shall prepare the following camera-ready copy ARTEP MTPs:

(a) ARTEP 08-409-MTP, Veterinary Service Headquarters.

(b) ARTEP 08-422-MTP, Medical Brigade (Corps/COMMZ).

(c) ARTEP 55-458-30-MTP, Medical Company, Holding.

(d) ARTEP 55-62-MTP, HHD, Transportation Composite Group.

(e) ARTEP 55-916-MTP, HHC, Transportation Railway Battalion.

(f) ARTEP 55-918-30-MTP, Transportation Railway Engineer Company.

(g) ARTEP 55-919-30-MTP, Transportation Railway Equipment Maintenance Company.

(h) ARTEP 55-927-30-MTP, Transportation Train Operating Company.

(i) ARTEP 43-649-30-MTP, Ordnance (maintenance) Company, GS.

4.2 The contractor shall develop a Statement of Work Performance Plan for the contract and a Front-End Analysis Management Plan for each MTP. The FEA Management Plan shall consist of the following sections.

(a) Scope of Work.

(b) Assumptions.

(c) Deliverables.

(d) Team Organization.

(e) Overall Objective (FEA)

(f) Mission Description of the Specific Unit.

(g) Unit Density and Locations (Information provided by CASCOM and participating schools).

(h) Resource Requirements (TDY, SME requirements, contractor provided equipment and other specialized requirements).

(i) Basic Data Sources (Information provided by CASCOM and participating schools).

(j) Coordination Responsibilities.

(k) Products (Examples: FEA outputs and MTPs).

(l) Milestones.

(m) Formats (Use formats in CASCOM Pamphlet 310-1 for FEA and formats in DA Pamphlet 25-36, TRADOC Regulations 25-30 and 25-33 for MTP development).

(n) Other information Required by Contractor.

4.3 The contractor shall prepare a LIMITED FEA for five MTPs.

(a) Contractor shall prepare an initial and a critical task list for each FEA.

(b) Company-level FEAs will have one critical wartime mission. This mission is the overall mission statement based on the unit's table of organization (TOE).

(c) Most logistics units have four supporting missions which will be used for the company-level FEA. These missions are:

(1) Relocate Company to a New Operating Site.

(2) Establish Company's Area of Operations.

(3) Conduct (Operational Activity).

(4) Defend Assigned Area.

(d) Most battalion-level FEAs have one critical wartime mission based on the unit's TOE and the following supporting missions which will be used.

(1) Plan (Operational Activity).

(2) Direct Movement of Subordinate Units.

(3) Establish the (Battalion Area).

(4) Direct the (Operational Activity).

(5) Defend the (Battalion Area).

Appendix H
Sample Contractor Statement of Work, Continued

(e) At the company-level FEA, the CASCOM Common Task Book will be used to develop the following missions with minor unique changes made on the training and evaluation outlines (T&EO) based on the specific unit. No task candidate worksheets and task analysis worksheets will be prepared for these tasks. These tasks are in the contractor data base and require limited word processing effort.

(1) Relocate Company to a New Operating Site.

(2) Defend Assigned Area.

(3) Conduct (Operational Activity). The administrative, NBC, air attack, and Level I defense tasks will be used.

(4) Establish Company's Area of Operations. Basic defense, set up, and advance/quartering party tasks will be used.

(f) The contractor's major FEA work will center on the operational mission of the company. This will require total FEA effort which will involve the development of eight to ten tasks. The contractor will prepare a supporting mission events list for each MTP's operational mission, the necessary functional organizational diagrams, task candidate worksheets, and task analysis worksheets. (CASCOM Pam 310-1).

(g) The contractor can use operational missions' T&EOs from previously prepared MTPs with modifications when applicable. The requirement to prepare a supporting mission events list, and functional diagrams still exists in order to prove these T&EOs' usability. Marked up T&EOs are acceptable when using these tasks.

(h) At the conclusion of the company-level FEA, the contractor will identify any crew drill candidates.

(i) The FEA for the battalion-level MTPs will be conducted by using the CASCOM Battalion-Level Common Task Book (contractor data base material) and unit-specific tasks prepared by the contractor. The contractor's major FEA work will center on the operational mission of the battalion. This will require total FEA effort which will involve the development of all the tasks, except those taken from previously developed T&EOs. The necessary functional organizational diagrams, and necessary task candidate worksheets and task analysis worksheets.

4.3.1 The contractor shall prepare a DETAILED FEA for the four railway units. Items 4.3 (a) through (d) apply. The contractor shall prepare the following items:

(a) Supporting missions events list for each supporting mission.

(b) An initial task list for each supporting mission.

(c) A task candidate worksheet for each initial task that is new or a common task that requires major revision (50% or more task steps have to be rewritten or three or more task steps have to be added).

(d) Marked-up T&EOs for common tasks can be used when revisions are not major.

(e) Task analysis worksheet requirements are the same as item 4.3 (c) above.

4.4 The contractor shall use the following procedures for the development of the MTPs.

(a) The cover and title page will be provided by the contractor. CASCOM and participating schools will provide the appropriate distribution restriction statement/destruction notice for the cover and title page.

(b) The Preface and Chapter 1 are "boiler-plate" information. The contractor will make minor changes to this text to indicate the specific unit.

(1) The contractor will prepare the organization diagram from the TOE for the Preface.

(2) The contractor will prepare paragraph 1-4, Missions and Tasks and the Critical Wartime Mission Echelon Relationship Diagrams in Chapter 1. In company-level MTPs this is one diagram and in battalion-level MTPs there are several.

(c) In Chapter 2, the lead-in information is "boiler-plate". The contractor will prepare one matrix, Mission to Collective Task Matrix, for each MTP. The format will be provided by the government (CASCOM).

(d) Chapter 3 is different for the company-level and battalion-level MTP.

(1) In the company-level MTP, the government (CASCOM) will provide the lead-in and the format for the mission outline.

(2) In the battalion-level MTP, Chapter 3, Training Plans, is basic "boiler plate" information. The contractor will make minor changes to this information based on the specific unit and develop a mission outline based on the format provided by the government (CASCOM).

(e) Chapter 4, Training Exercises, will consist of one field training exercise (FTX) based on the critical wartime mission and one situational training exercise (STX) for each supporting mission.

(1) The lead-in for Chapter 4 is "boiler plate" material.

(2) The format for the FTX and STXs will be based on the formats provided by the government (CASCOM). The contractor will develop the illustration for the FTX.

(f) Chapter 5 will consist of the T&EOs provided by government (CASCOM and participating schools) and the ones prepared by the contractor. The government-provided T&EOs are the same as the tasks provided during the FEA.

(1) The lead-in for Chapter 5 is "boiler plate" material.

(2) The format for the T&EOs will be provided by the government (CASCOM).

(3) The sequence for the T&EOs will be provided by the government (CASCOM and participating schools).

(4) The Opposing Force tasks will be provided by the government (CASCOM).

(g) Chapter 6, External Evaluation, is basically "boiler plate" information. The contractor will make minor changes based on the specific unit.

(h) All "boiler plate" material is part of the contractor data base material.

(i) Appendix A, Combined Arms Training Strategy, will be provided by the Government.

(j) Appendix B, Battlefield Operating Systems, is in the contractor's data base.

(k) Appendix C, Sample Operation Order and Annexes, is in the battalion-level and above MTPs only and will be prepared by the contractor. A sample will be provided by the government (CASCOM).

(l) References will be prepared by the contractor according to TRADOC Regulations 25-30 and 25-33.

(m) Glossary will be prepared by the contractor according to TRADOC Regulations 25-30 and 25-33.

(n) Appendix D, Threat Analysis, is in battalion-level and above MTPs only and will be provided by the government (CASCOM and participating schools).

(o) No verb list will be prepared for the MTPs.

(p) Excerpts from the Geneva Convention will be an Appendix H the MTPs prepared for the AHS. This information will be provided by the AHS.

4.5 After a sixty-day field review of the coordinating draft, the CASCOM and participating schools will review all the comments and submit only those appropriate comments to the contractor. The government has twenty days to review all the field comments.

4.6 The contractor will prepare a final draft for review by CASCOM and participating schools. If applicable, CASCOM and participating schools will conduct a DRAG and secure the Commandant's approval before the contractor prepares the camera-ready copy MTP. If a DRAG is conducted, any time required to complete the process, which exceeds the plan's allotted "Government Review" time, will be added to the plan; and the required CRC delivery date will be extended by an equal amount of time.

4.7 The contractor will incorporate the comments received from the review in paragraph 4.6 and prepare a camera-ready MTP.

4.8 Standards of Performance. The government will determine the quality of deliverables by standards set forth in AR 25-30; DA Pamphlet 25-36; TRADOC Regulations 25-30 and 25-33; and CASCOM Pamphlet 310-1, in addition to subjective acceptance by designated subject matter experts.

5.0 Deliverable Product/Output/Schedule for Each Required Task.

5.1 All deliverables shall be submitted according to the specified format and typed single spaced on standard bond paper. The illustration in Chapters 4 and 6 (same illustration) will be prepared by the contractor. All CRC deliverables will be submitted in hard copy and on disks in WordPerfect 5.1 for those schools using it, in WordPerfect 5.1 or 5.0 for CASCOM at CASCOM's option, and in ASCII for those using other software to generate MTPs. One copy of WordPerfect 5.1 software will be provided under the contract to participating schools that want to use it. The ASCII disks must be capable of being imported into word processing software used by participating schools, usable for the next iteration of the MTP, and recognizable as an MTP. The government (CASCOM and participating schools) will coordinate field review with using units and review agencies and furnish the contractor with comments on each deliverable. Contractor will not accomplish more than 50 percent of the next deliverable prior to the acceptance of the previous deliverables. Final copies of all deliverables will be furnished according to the milestone dates in the milestone schedule below and in the required formats. These milestone dates will be used for the following clusters of ARTEP MTPs.

(a) ARTEP MTPs 43-649-30, 55-62.

(b) ARTEP MTPs 08-409, 09-422, 08-458-30.

(c) ARTEP MTPs 55-916, 55-919-30, 55-919-30, 55-927-30.

5.2 Statement of Work Performance Plan/FEA Management Plans. These plans will be delivered simultaneously for all MTPs within 30 days after the contract start date. The government (CASCOM and participating schools) has 20 days to review these plans.

5.3 Required Mission List, Command and Functional Organizational Diagrams, Critical Wartime Mission Echelon Relationship Diagram, Supporting Mission Events List, Initial Task List. These items will be delivered after the government receipt of the plans discussed in paragraph 5.2 as follows:

Group 1 - 30 days

Group 2 - 60 days

Group 3 - 133 days

The government has 30 days to review these FEA outputs.

5.4 Task Candidate Worksheets for the Operational Missions and Any Other Task That Requires Full Development and Proposed Critical Task List. These items will be delivered 45 days after the in-progress review (IPR)/work session in paragraph 5.10(a). The Government has 30 days to review these FEA outputs.

5.5 Required Task Analysis Worksheets or Marked-Up T&EOs. The contractor can mark-up existing T&EOs when applicable or develop worksheets for tasks that have not been developed. This deliverable is done for the "establish" mission and "operational" mission. It is not done for the battalion and company-level common tasks. These items will be delivered 45 days after IPR in paragraph 5.10(b). The government has 45 days to review these FEA outputs.

5.6 MTPs' Coordinating Drafts for Field Review. The contractor has 30 days to incorporate comments received during the IPR/work session in paragraph 5.10(c). Contractor should estimate 30 days to print the specified number of copies need for field review based on unit density as provided by the government (CASCOM and participating schools) and TRADOC Regulation 310-2 per MTP for field review. The field review requires 60 days. The contractor will provide 5 copies of each MTP to the CASCOM and the remaining copies to the applicable school. The number of coordinating drafts to be produced will not exceed 60. CASCOM and participating schools will make appropriate distribution of coordinating drafts. The government has 20 days to review comments from the field review and determine which comments to pass on to the contractor for incorporation in the final draft.

5.7 MTPs' Final Drafts. The contractor has 40 days to incorporate field comments and prepare final drafts. The review period for the final drafts is 30 days.

6.0 Special Considerations.

6.1 When using government provided information for coordinating and final drafts, changes made to these materials will be highlighted for government review.

6.2 Travel to like or similar Active Army units for operational information is limited to one visit per MTP (company-only) or group of MTPs (battalion total) for OCS and AHS proponent MTPs. Four visits total to the Milwaukee RC unit are authorized for the railway MTPs. (The 1st and 3rd IPRs will require a side trip to Granite, IL). All travel will be conducted by no more than two contractor representatives for one week (single unit) and two weeks (multiple like units).

6.3 Travel to participating schools is limited to two visits for conferring with SMEs. This travel should be conducted by the closest contractor agency and must not extend beyond one week per visit. SMEs at schools will be available during these visits. SMEs may be on a part-time basis or via teleconference center. Contractor will provide the CASCOM and schools at least two weeks prior notice of the visit in order that the SMEs can be made available and that the work area can be set up.

6.4 During these school visits, the government will provide 200 square feet of work area for contractor personnel, if desired by the contractor.

6.5 Contractor shall furnish all necessary personnel, materials, equipment, and services unless otherwise provided by this contract.

6.6 Contractor shall furnish WordPerfect 5.0/5.1 or ASCII disks. The material on the disks will be usable for the next iteration of the MTP and recognizable as an MTP when converted into the word processing software used at the participating schools. Two sets per MTP of the completed disks is ASCII are to be mailed to the Automated Training Management Office (ATMO), ATTN: ATTG-UA, Fort Lewis, WA 98433-5000, one set in WordPerfect 5.1 or ASCII to the participating schools at their option, and one set in WordPerfect 5.0 and 5.1 to CASCOM at CASCOM's option.

6.7 Government (CASCOM and participating schools) will provide all government-provided information at the start of the contract Statement of Work.

6.8 The days stated in the Statement of Work--Statement of Work are calendar days.

7.0 Applicable References from the Contract Statement of Work.

7.1 AR 25-30

7.2 AR 310-25

7.3 AR 350-2

7.4 DA PAM 25-36

7.5 FM 25-100

7.6 FM 25-101

7.7 FM 25-2

7.8 FM 25-4

7.9 FM 25-5

7.10 TRADOC Reg 25-30

7.11 TRADOC Reg 25-33

7.12 TRADOC Reg 350-7

8.0 Government Furnished Material. See enclosure 1. Participating schools will also provide the following: Complete TOE for subject unit(s) and parent unit, documents that describe the unit's relationship to other units in the theater, and current branch material common MQS manuals if they exist.

9.0 Subject-Matter Experts. See enclosure 2.

NAME Technical Coordinator U.S. Army CASCOM	NAME COLONEL, TC Director, Concepts and Doctrine U.S. Army CASCOM

Appendix H
Sample Contractor Statement of Work, Continued

Enclosure 1

GOVERNMENT FURNISHED MATERIAL
FOR STATEMENT OF WORK
FROM THE U.S. ARMY TRANSPORTATION SCHOOL

NUMBER	NAME OR TITLE	DATE REC'D	RET'D

ARMY REGULATIONS

55-1 Army Transportation Services in a Theater of Operations
55-10 Movement Control in a Theater of Operations (Change 1)
55-19 Marine Casualties
55-20 Army Rail Transport Units and Operations (Change 1)
55-30 Army Motor Transport Units and Operations (Change 3)
55-40 Theater Airlift Operations
55-50 Army Water Transport Operations (Change 1)
55-60 Army Terminal Operations
56-3 Objectives and Policy for Army Rail Equipment; Management of Army Rail Equipment
56-9 Watercraft Rules and Regulations
420-72 Surfaced Area, Railroads and Structures for DOD Locomotives
JP 4-01.6 Joint Logistics Over the Shore (JLOTS)

FIELD MANUALS

55-15 Trans Reference Data
55-17 Terminal Operations Coordinator's Handbook
55-20 Army Rail Transport Units and Operations
55-21 Railway Operating and Safety Rules
55-50 Army Watercraft Transport Operations
55-60 Army Terminal Operations
55-501 Watercraft Operations
55-501-1 Landing Craft Operations Handbook
55-501-2 Harbor Craft Crewman's Handbook
55-509 Marine Engineers Handbook

DEPARTMENT OF DEFENSE REGULATIONS

4140.50R Management and Standards for DOD Locomotives

DEPARTMENT OF THE ARMY PAMPHLETS

738-750 The Army Maintenance Management System

TECHNICAL MANUALS

55-202 Operation and Maintenance of Diesel-Electric Locomotives
55-203 Maintenance of Railway Cars
55-204 Maintenance of Railroad Way and Structures
55-205 Inspection and Maintenance of US Army Owned Foreign Rail Equipment

1-1

55-2210-212-24&P Unit, Intermediate Direct Support and Intermediate General Support Maintenance Manual (Including Repair Parts and Special Tools List) for Railway Crane Multipurpose

55-2210-212-24&P Unit, Intermediate Direct Support and Intermediate General Support Maintenance Manual (Including Repair Parts and Special Tools List) for Railway Crane Multipurpose

* References provided to OMNIBUS contractor under previous contract.

** References not currently available but will be published during contract period.

This GFM is provided to the Contractor for use during the time frame to complete the Statement of Work. At the completion of the Statement of Work, all GFM will be returned to Government Property.

I have verified that all of the above listed data/information is available for use during this Statement of Work and understand the conditions for its use.

NOTE: This form will be signed and dated at the start of the Statement of Work and its completion.

Start:

_____ _____
Technical Coordinator/Date Contract Representative/Date

Completion:

_____ _____
Technical Coordinator/Date Contract Representative/Date

Appendix I
MTP/Drill Book Evaluation

Name:_____ Position:_____ Organization:_____

Office Symbol:_____ DSN:_____ FAX:_____

Request for feedback

We encourage your comments on this pamphlet and its application in preparing collective training products (MTPs and drill books). Your candid responses to questions below will help identify areas for improvement. Use a DA Form 2028 (Recommended Changes to Publications and Blank Forms) to provide recommended changes. If you prefer, you can call DSN: 680-5577 and discuss your comments with personnel of the Training Development Management Branch, Training Development and Analysis Directorate.

Application to work

Is this pamphlet useful to you? Yes:____ No: _____

Are there areas you feel needed:

- Explaining?: Yes:_____ No:_____
- Revision? Yes:_____ No:_____
- Comments:

Content

Have you ever prepared collective training products? Yes:_____ No:_____

Did the pamphlet provide enough information to assist you in preparing MTPs and drill books? Yes:_____ No:_____

Are there any topics in the pamphlet that caused you problems?
Yes:_____ No:_____

Comments:

Improvements

What would you do to improve this pamphlet if you were to republish it?
Comments:

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Glossary

Section I - abbreviations

ADTLP	Armywide Doctrinal and Training Literature Program
ASAT	Automated Systems Approach to Training
ARTEP	Army Training and Evaluation Program
BOIP	Basis of Issue Plan
BOS	Battlefield Operating Systems
CATA	Combined Arms Training Activity
CATS	Combined Arms Training Strategy
CFX	Command Field Exercise
CPX	Command Post Exercise
CS	Combat Support
CSS	Combat Service Support
DCST	Deputy Chief of Staff for Training
DOES	Directorate of Evaluation and Standardization
DRAG	Doctrinal Review and Approval Group
FCX	Fire Coordination Exercise
FM	Field Manual
FRAGOS	Fragmentary Orders
FTX	Field Training Exercise
HHC	Headquarters and Headquarters Company
IPR	In Progress Review
LCX	Logistical Coordination Exercise
LFX	Live Fire Exercise
MAPEX	Map Exercise
METT-T	Mission, Enemy, Troops, Terrain and Weather, and Time Available
MILES	Multiple Integrated Laser Engagement System
MOPP	Mission Oriented Protective Posture
MSC	Major Subordinate Command
MTP	Mission Training Plan
NBC	Nuclear, Biological, Chemical
OC	Observer Controller
OPFOR	Opposing Forces
OPORDS	Operations Orders
SAT	Systems Approach to Training
SME	Subject Matter Expert
SOW	Statement of Work
STP	Soldier Training Publication
STRAP	System Training Plan
STX	Situational Training Exercise
T&EOS	Training and Evaluation Outlines
TASC	Training and Audiovisual Support Center
TDA	Table of Distribution and Allowances
TEWT	Training Exercise Without Troops
TOE	Table of Organization and Equipment
TRADOC	Training and Doctrine Command
TRADOC Reg	Training and Doctrine Command Regulation
USATSC	U.S. Army Training and Support Center

Section II - Terms

Army Training and Evaluation Program (ARTEP)
A program for collective training in units. It describes the collective tasks which the unit must perform to accomplish its critical wartime missions and survive on the battlefield.

Battle Drill
A critical collective task at squad or platoon level involving fire and/or maneuver, executed without the application of a deliberate decision making process, initiated on cue which is standard throughout like units in the Army, and is accomplished with minimal leader orders.

Battlefield Operating Systems
The major functions (maneuver, fire support, air defense, intelligence, command and control, mobility and survivability, and combat service support), occurring on the battlefield. Each system is used by the Total Army to successfully execute operations.

Coaching Points
Statements in a drill which help clarify the performance measures.

Collective Task
A unit of work or actin requiring interaction between two or more individuals for its accomplishment (i.e., operate a M105 Howitzer). It may also be a mission requirement, such as secure a bridgehead, that can be broken down into individual tasks.

Collective Task Analysis
Analysis process that identifies all actions and decisions required to accomplish each critical collective task.

Collective Task Analysis Worksheets
Worksheets used to record the actions and decisions required to perform a given collective task. Includes task performance specifications such as conditions, standard, cue, task steps, references, safety and environmental factors/hazard, skills/knowledge, and performance measures.

Collective Task List
Compilation of collective tasks identified during mission analysis which are required for mission accomplishment.

Collective Training
Training, either in institutions or units, that prepares cohesive teams and units to accomplish their combined arms and service missions on the battlefield.

Collective Training Development
A systematic process of creating training materials and products for collective training.

Collective Training Matrixes
Graphic portrayals of collective training data which shows an organized set of relationships between missions, collective tasks, leader tasks, and/or individual tasks(i.e., collective-to-individual task matrix, FTX-to-mission matrix, mission-to-collective task matrix, publication reference-to-collective task matrix, STX-to-FTX matrix).

Glossary, Continued

Section II - Terms

Combined Arms Training Strategy
The Army's over arching strategy for the current and future training of the force. It describes how the Army will train the total force to standard in the institution, unit and through self-development. It also identifies, quantifies, and justifies the training resources required to execute the training.

Command Field Exercise
A field exercise with fewer troops and vehicles, but with full command and control, and combat service support elements. It involves the commander, staff, key elements of participating units, and communications between headquarters.

Command Post Exercise
An exercise designed to train leaders and staff in the planning and execution of tactical operations without requiring the presence and participation of the soldiers in the unit.

Common Collective Tasks
Those critical collective tasks that apply to all units in general, or to many units that have different service school proponents.

Condition
The situation or environment in which a soldier or unit is expected to perform a task (e.g., tools, reference, weather, restrictions).

Contract
A promise or a set of promises for the breach of which the law gives a remedy, or the performance of which the law in some way recognizes as a duty. Its necessary elements are an offer, acceptance, and consideration.

Crew Drill
A collective task performed by the crew of a weapon or piece of equipment to perform the systems combat function or to preserve life, which is standard throughout the Army, and accomplished with minimal leader orders.

Critical Collective Task
A task determined to be essential to wartime mission, duty accomplishment, or survivability and requires two or more to perform.

Critical Collective Task List
A list of all collective tasks selected as critical collective tasks by the Critical Collective Task Selection Board.

Critical Wartime Missions
Those missions, assigned or implied, that a unit must accomplish in wartime. Critical wartime missions are identified during mission analysis.

Doctrinal Review and Approval Group
A group of senior officers who have been chosen based on their experience and knowledge to review doctrinal manuals prior to command approval and publication.

Section II - Terms

Drill
A disciplined, repetitious exercise to teach and perfect a skill or procedure, e.g., fire, man overboard abandon ship, lifeboat, and damage control drills on Army water craft.

Drill Books
Separate training documents developed for squads and platoons, or equivalent units. They provide a limited number of DA standard methods (battle drills) for executing selected standard critical collective tasks.

Drill Candidate List
A compilation of low level collective tasks identified for drill development.

External Evaluation
An evaluation initiated by higher headquarters to diagnose the proficiency of an individual or units.

Field Test
A tryout of any training on a representative sample of the target population, under the same conditions the actual training will occur, to gather data on the effectiveness of training in regard to error rates, criterion test performance, and time to complete the training.

Field Training Exercise
A high cost high overhead exercise conducted under simulated combat conditions in the field. FTXs are the highest level exercise used by a platoon, company, or battalion to train to mission proficiency at its level.

Fire Coordination Exercise
A reduced scale exercise to train on the integration of all organic weapons systems as well as indirect fire and supporting weapons. Subcaliber devices are emphasized.

Fragmentary Orders
Orders issued to subordinates when there is not enough time to give a complete OPORD, or when there is a change to an existing OPORD.

In-Process Review
A joint review and decision on proceeding to the next phase of development. It provides recommendations, with supporting rationale.

Individual Task
A unit of work or action accomplished by a single individual. It has identifiable start and end points and results in measurable accomplishments or products.

Initiating Cue
A signal to begin performing a task.

Leader Task
An individual task (Skill level 2 or higher), performed by a leader that is integral to the performance of a collective task.

Glossary, Continued

Section II - Terms

Live Fire Exercise
An exercise designed to allow a team/unit to engage targets with its organic weapons and support.

Logistical Coordination Exercise
A hands on exercise that allows leaders to become proficient at conducting unit sustainment operations such as supply, transportation, medical, personnel replacement, maintenance, and graves registration.

Map Exercise
A low cost, low overhead training exercise that portrays military situations on maps and overlays that may be supplemented with terrain models and sand tables. It enables commanders to train their staffs in performing essential integrating and control functions under wartime conditions.

MILES System
A simulation system used in small unit tactical training to develop skills required to fight and survive on the modern battlefield. It uses an integrated family of low power, eye safe, laser based devices that simulate the casualty producing effects of the direct fire weapons such as M-16 rifles, M-60 machine guns, and Vipers.

MIL-STD-1379D
A standard that provides tailorable requirements and contract task descriptions for acquisition of military training products. It is applicable to military departments, defense agencies, and industry, and should be applied in all military training program acquisitions and major modification programs.

Mission Activity List
A sequential listing of all activities that must take place to accomplish a mission.

Mission Analysis
A process to review mission requirements and develop collective task statements. This process identifies unit, organizational, and functional structure, stated and implied missions, and collective and individual tasks.

Mission Essential Task
A collective task in which an organization must be proficient to accomplish an appropriate portion of its wartime mission(s).

Mission List
A compilation of missions for the units with a TOE.

Mission Matrix
Graphic display of the identified relationships between missions performed at different echelons. It identifies what missions the next lower echelons are performing during each of the higher level missions.

Mission Outlines
Graphic portrayals of the relationship between critical wartime missions and the subordinate tasks inherent to those missions. Mission outlines are designed to provide the commander with a visual outline of the unit's critical wartime missions and in a format which helps the planning and management of training at his/her level.

Section II - Terms

Mission Training Plan
Descriptive training documents which provide units a clear description of "what" and "how" to train to achieve critical wartime mission proficiency. They are designed to identify and elaborate on critical wartime missions on terms of comprehensive, detailed training and evaluation outlines. They also provide exercises and other training related to training management aids to assist field commanders in the planning and execution of effective unit training.

Missions
A series of related tasks that comprise the major capabilities and requirements imposed on a unit by its parent organization.

Observer Controller
An individual tasked to evaluate training, and provide administrative control and constructive feedback to participants during a training exercise.

Operations Order
Orders to subordinates which gives the essential information needed to carry out an operation.

Opposing Force
An organized force created from U.S. Army units trained, organized and equipped to portray the doctrine, tactics, and configuration of a potential adversary armed force during U.S. Army forces training.

Performance Measures
Those behaviors, products, and characteristics that the scorer observes to determine if the soldier has performed a task correctly. Successful accomplishment of these measures result in meeting the task standard. In soldier's manuals, the performance measures are the steps to follow in performing a job task.

Run-through Instructions
Instructions in a drill which describe how to practice the drill.

Setup Instructions
Instructions in a drill which describe how the drill resources, training site, and unit instructions are used to conduct the drill.

Situational Training Exercise
A STX is a short, scenario driven, mission oriented type tactical exercise that provides a vehicle to train a group of closely related collective tasks and battle drills together. STXs provide preconstructed, bite sized, short term exercises that are central to sustainment training for tactical mission proficiency.

Statement of Work
A detailed description of that which the contractor is to accomplish to satisfy the government’s needs.

Supporting Individual Tasks
Tasks performed by individuals that are integral to the performance of a collective task.

Glossary, Continued

Section II - Terms

Systems Approach to Training
A logical process for effectively and efficiently determining what, where, when, and how tasks should be taught. It consists of five interrelated phases of analysis, design, development, implementation, and evaluation.

Table of Organization and Equipment
Prescribes the required structure, manpower, and equipment for several organizational options for a particular type unit. It also specifies the normal tasks the unit is designed to perform and the capabilities the unit has to accomplish its mission.

Tactical Exercise Without Troops
A low cost, low overhead exercise conducted in the field on terrain suitable for training units for specific missions. Commanders use this exercise to train subordinate leaders and battle staff at any echelon to analyze terrain, employ units according to terrain analysis, emplace weapon systems to best support the unit's missions, plan conduct of the unit mission, and coach subordinates on best use of terrain and proper employment of all assets.

Talk-Through Instructions
Instructions in a drill which describe how to state and demonstrate the actions that make up the drill.

Task
A clearly defined and measurable activity accomplished by individuals and organizations. Tasks are specific activities which contribute to the accomplishment of encompassing missions or other requirements.

Task Standards
The ultimate outcome criteria for the task.

Task Steps
The required unit actions, supporting collective tasks performed by subordinate echelons, or the individual tasks executed during the performance of a collective task.

Training and Evaluation Outlines
Part of the ARTEP mission training plan which provides collective tasks, conditions, and performance standards. These form the basis for training, internal evaluations, and formal external evaluations.

Training Exercises
A method of training which involves the use of a maneuver, operation, or series of drills. They are used in units to train teams or units to accomplish their combined arms and service missions on the battlefield.

Validation
A process of determining that, within given constraints, training objectives reflect the actual tasks performed individually and collectively to accomplish unit mission requirements.

Walk-Through Instructions
Instructions in a drill which describe how to perform the drill at a reduced speed.

Section II - Terms

Wargame
A simulated battle or campaign to test military concepts using a terrain board, map computer simulation, or available method.

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Major General, GS
Chief of Staff

HUGH V. MARKEY
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